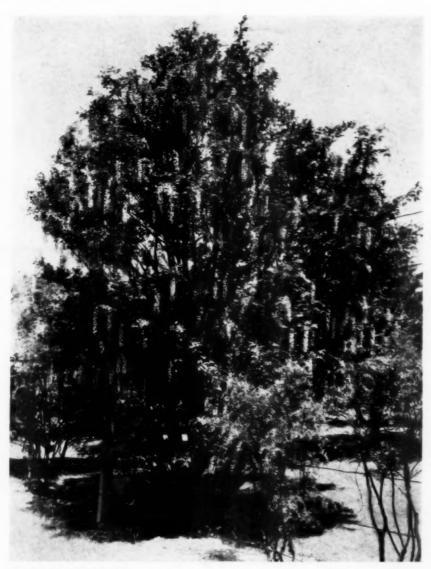
NOV 22 7935 Day

# AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

**OCTOBER 1, 1935** 



LABURNUM ALPINUM

California Convention Maturity of Stock Winter Protection

### AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

F. R. KILNER, Editor Published Semi-monthly by

#### AMERICAN NURSERYMAN PUBLISHING CO.

508 S. Dearborn Street,
Chicago, Ill.
Telephone: Wabash 8194
New York Office—67 West 44th Street
N. L. Huebsch Tel., Murray Hill 2-4871

Entered as second-class matter December 14, 1933. at the post-office at Chicago, III., under the act of March 3, 1879.

SUBSCRIPTION PRICE, \$1.00 per year; outside the United States, \$1.50. Single copies, 10c.

ADVERTISING RATES on application. Forms close on 10th of month for mid-month issue and on 25th of previous month for first-of-month issue. If proofs are wanted, copy should be on hand one week earlier.

EDITORIAL communications on subjects connected with nurseries, arboriculture or other phases of commercial horticulture are welcomed by the editor. Also articles on the subjects and papers prepared for conventions of nursery associations.

#### PLANNING THE PLANTING.

While the critically minded believe that the terms landscape architect and landscape gardener do not accurately describe those who engage in the planning and planting of home grounds, there is no question as to the importance of their work in developing the market for, and the use of, nursery stock. The development of landscaping, if we are content with that term, has brought it to a point in recent years where it can claim a place among the fine arts. Certainly the pictorial effects produced by the planting of home grounds according to their design justify that claim. No longer is it enough to plant trees and shrubs about a lawn; they must be placed for effect.

The nurserymen's slogan, "It's Not a Home Till It's Planted," expresses a thought, but some think the word "right" should be added to complete its meaning. To carry out that fuller meaning, all nurserymen in the retail business need to concern themselves with the planned planting of their stock as much as with its sale. The greater the customer's satisfaction, the better buyer he will become. The leading retail nursery firms have gone far in that direction, some by means of data and plans presented in their catalogues and others by the establishment of landscape departments. They are especially helpful on the smaller jobs, where the home owner is usually unwilling to pay a landscape architect's fee on top of the cost of the nursery stock.

The criticism that used to be made of nurserymen engaging in landscape planning was based on their lack of knowledge of the art. Time has changed much of that, for some of the large retail nursery firms employ landscape architects who are among the most expert. Smaller firms must recognize that the planning of a nursery planting requires knowledge and training, just as much as the production of the stock used. Unfortunately, little schooling in landscape art is obtainable, but those who would engage in it should seek to fit themselves as fully as possible. There are a number of good books on the subject in general and on various phases of it. Practical study and training are an important supplement. As

#### The Mirror of the Trade

time goes on, fuller education in landscaping will be available for those who wish to engage in it as an occupation. The industry should see that it is, as an essential in the progress of beautification in America through the proper planning of home ground and other plantings.

#### LABURNUM ALPINUM.

With the Scotch laburnum, L. alpinum, being hardier and having more upright and stiffer growth than L. anagyroides (vulgare), it is strange that the latter species has gained the stronger hold in American trade. Although the individual, pea-like, yellow flowers of the Scotch laburnum—illustrated on the front cover—are smaller than those of anagyroides, the racemes of the former are longer and slenderer, often hanging fifteen to sixteen inches from the tips of the branches, whereas the drooping clusters of anagyroides rarely exceed twelve inches.

Golden chain is an exceedingly appropriate common name, as anyone who sees these small trees while they are in bloom will vouch. The flowering period is May and June, the Scotch laburnum blooming during the latter part of the sixth month, about two weeks after the common golden chain. The bright yellow clusters stand out boldly against the dark green, alternate, trifoliate leaves. These are retained until late in the fall and are released without changing color. The blooms are followed by narrow pods that persist a long time. All parts of the plants, especially the forming fruits, are poisonous. Attaining a height of about thirty

Attaining a height of about thirty feet at maturity, the Scotch laburnum surpasses the maximum growth of the common golden chain by about ten feet. Other good features of these small trees are that they are rarely bothered by insects or diseases and thrive in partly shaded places as well as in full sun. However, the situation should be well drained.

Since plants usually bloom the first year when grown from seeds, this is considered the best method of propagation. However since individuals vary noticeably in their flower production, the selection and vegetative reproduction of outstanding specimens are common practices, particularly in England, where these plants are extremely popular. Superior types can be grafted or budded on inferior seedlings, but propagation can also be accomplished by suckers and layers. All laburnums are best handled balled and burlapped.

The Scotch golden chain is hardy in Massachusetts and Ohio and in Indiana about as far north as Fort Wayne and Logansport, but has not proved satisfactory at the Morton Arboretum, located a few miles west of Chicago. The growth there does not ripen sufficiently and is winterkilled. Sometimes the trees sprout from the base, but they eventually die. Where L. alpinum can be made to thrive, it should be used more frequently.

#### NEW HARDEE PEACH.

The editorial teeth last week sank into another new peach, when a basket from the French Nurseries, Clyde, O., brought samples of the new Hardee peach, picked from the fruit trees at the Ohio agricultural experiment station, Wooster.

This new variety is protected under plant patent No. 120, and the French Nurseries have been licensed by the discoverer, Don S. Byers, to propagate and distribute this peach. According to the description, the most important characteristic is hardiness, the tree last winter withstanding the cold of 18 degrees below zero at Wooster. Hardee is an Elberta-type peach, quite similar in color and taste to that variety. The tree is described as intermediate in habit between J. H. Hale and Elberta.

#### SOIL ORGANIC MATTER.

Soil organic matter is a valuable but not indispensable asset in the growing of crops, declared A. B. Beaumont, professor of agronomy, in his talk to nurserymen during farm and home week at Massachusetts State College, Amherst, recently. In the economy of nature it is always found in the most productive soils. Plants differ widely in the extent to which soil organic matter is helpful to them. The lowest forms of plant life grow well with little or no soil organic matter.

Many benefits may accrue to the plant and planter from the presence of organe matter in the soil. It improves sandy soils by acting as a binder and increasing their water-holding capacity; losens and lightens heavy loams and makes them easier to work; serves as an important source of plant food; improves biological conditions of the soil; checks leaching of plant food and erosion of soil, and helps in other less tangible ways.

There are two general types of soil organic matter. First, there are the materials more resistant to decay, such as domestic and imported peats and peat mosses, sawdust and shavings, and other woody and fibrous materials. Substances such as these are generally harmless if used in reasonable quantities and in many cases do much good by serving as a protection against evaporation of moisture and by improving the physical condition of the soil when incorporated with The second type of soil organic matter includes the more active materials, such an animal manures, green manures and crop residues. Such materials decay fairly rapidly in soils in good condition. On the whole, they are much more beneficial to the growing crop than are those of the first type.

Advantage should be taken of every opportunity to increase the amount of soil organic matter by the use of catch and cover crops. In general, legumes are the best crops to grow for soil organic matter, but special conditions may make nonlegumes the most practical. Well cared for animal manures with the right kind and amount of bedding are hard to beat as a source of soil organic matter. Supplementary use of commercial fertilizer may be necessary for best results.

Practical methods have been worked out for making artificial manure from waste organic materials, such as straw, corn stover, leaves, etc. This product seems to be fully as good as, or in some cases better than, the natural manure. Vol.

Th

of th

ervm

was Septe histo creat bers, adva ketin did a ment of a state nurse ner t signe The l cent engag least volun state agree be co

will n to wh memb the m Were speed leaps And impor organ bers of the the pa should memb tary

about

minut

Los

Wh

bers

Wite carry all of types. of the Angel and is ern (tion. Oakla:

dent e

## AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

#### The Chief Exponent of the American Nursery Trade

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

Vol. LXII

rdee s at

nder

ench

the gate g to

last 18 rdee

The in

but

urs

c at

erst.

e it

tent

life

anie

ant

kes

im-

Ves

eks

ble

soil

ma.

28

eat

her

in

nis

ith

at-

ose

erv

nie

ke

ell

ht

et

**OCTOBER 1, 1935** 

No. 7

### California Silver Jubilee

Large Attendance Celebrates Twenty-fifth Annual Convention of the California Association of Nurserymen Held Last Week at San Diego

The twenty-fifth annual convention of the California Association of Nurserymen-the silver jubilee meetingwas well attended at San Diego, Cal., September 26 to 28, and was one of the best conventions in the association's history. If it did nothing more than create a committee to win new members, so that the organization can take advantage of the new California mar-keting agreement act, the convention did a fine piece of work. Such an agree-ment is sanctioned by the department of agriculture and approved by the state and provides control of intrastate nursery business in much the same manner that the N. R. A. codes were designed to operate in interstate traffic. The law provides that seventy-five per cent of the persons, firms or individuals engaged in any industry and doing at least seventy-five per cent of the total volume must express in writing to the state their desire to enter into a trade agreement before the application may considered.

What the convention lacked in numbers it made up in enthusiasm, which will no doubt carry the association back to where it was before the individual members became more concerned over the matter of self-preservation. Actions were started at this meeting which will speed the growth of the association by leaps and bounds.

Another thing accomplished of vital importance to the future growth of the organization was the fact that the members went on record to print a digest of the past three years' meetings and the papers that were read to members at this year's meeting. This yearbook should be worth the price of a year's membership to any nurseryman. Secretary Henry W. Kruckeberg declared about fifty requests had come into the Los Angeles office for last year's minutes.

#### New Officers.

Without a doubt, the new officers will carry the association far, for they are all of the most active and determined types. The new president, H. A. Marks, of the Germain Seed & Plant Co., Los Angeles, was vice-president last year and is a former president of the Southern California Nurserymen's Association. The vice-president, J. R. Crombie, Oakland, has for many years been president of the Central California Nursery-

men's Association. Henry W. Kruckeberg has long been the secretary and is the oldest living member. As treasurer, J. C. Watts, of the Armstrong Nurseries, Ontario, was reëlected. The four new board members elected were: R. D. Hartman, San Jose, the retiring president; George C. Roeding, Jr., Niles; Roy Wilcox, Montebello, reëlected, and Gene Fowler, Newcastle.

After considerable balloting, it was decided that next year's convention should be held at San Jose the last Thursday, Friday and Saturday of August. It is expected that the Pacific Coast Association of Nurserymen will accept an invitation to hold its meetings at San Jose at the same time, with some joint sessions. San Francisco is expected to be the scene of the 1937 convention.

F. A. Tetley, Jr., Riverside, told the convention that the citrus growers have organized for self-protection and to improve the conditions that exist among the citrus nurseries. This association, in a survey, found that there are about 250,000 acres of citrus orchards in California, that it takes about one-half million trees to keep up with the planting and yearly mortality among the orchards and that gradually the citrus acreage is shrinking, in spite of the fact that there is always considerable new planting.

He raised the question of what will happen to the olive and avocado producers when the world becomes acquainted with these two fruits as it is with oranges. At the present time, seventy-five per cent of the olives and avocados grown in California are consumed in California. So far, he stated, the few commercial plantings of cherimoyas and sapotas are having fair success, and as soon as these fruits became better known, their commercial possibilities will be much better.

#### Disease and Pest Control.

S. A. Gebhardt, Fresno, in reporting for the committee on insects and diseases, stated that only two important pests had been discovered in California recently. A new scale pest, found at the government farm at Chico, attacks all stone fruits and gave the government some worry for a little time. The pest was found in Egypt in 1923, and the authorities there stated that it was also known in Turkey and Tripoli. By

quick coöperation of the authorities at Washington with the state authorities, steps were taken to combat the pest, and as the only infestation was found at Chico, it was fast put under control. The danger of the pest is that it was found on thirteen species of stone fruits and has the habit of infesting the fruit leaves and branches; no natural enemies for it have been discovered.

The second pest, called the obscure scale, was introduced into Riverside and has now spread to the walnut plantings there.

Another pest found in California but not considered serious, as it can easily be put under control, is the white snail. It needs quick attention, as in one of the infestations there were 3,600 of these little animals found on one orange tree, which is a favored host. The campaign for the extermination of the white fly is being continued with hopes that the pest will eventually be exterminated.

In the San Joaquin valley, some chestnut blight was found, but through the coöperation of the department of agriculture, the trees were destroyed. At Coloma, two small infestations of rust were discovered on cricas.

#### Legislative Matters.

Roy Wilcox gave the report for the legislation committee, and in view of the fact that the report was long, he touched only the high lights in his remarks from the floor. The most important thing, according to Mr. Wilcox, is the fact that assembly bill 1870 has been held constitutional in the Superior court of Los Angeles county and this law, which makes it prohibitive for anyone to sell merchandise below cost, has been amended so that an average cost in any vicinity can be used, thus making the law applicable to the nursery trade. The nurseryman can now get convictions on complaints more easily. Formerly the burden of proof was upon the complainant, and if the defendant could prove that his costs were below his selling price, the case would be thrown out of court. Under the new amendment and with surveys that can be made in any vicinity, average cost figures can be obtained, and then the burden of proof is on the defendant. The association is working with the state department of agriculture to have

surveys made in all lines of the nursery

The report of Toichi Domoto, San Francisco, for the nomenclature committee recommended that the state department of agriculture reproduce the list of approved plant standardizations and send a copy to every licensed nurseryman in the state and that the association place its approval on the plan for all disputes on stock shipped to be passed on to the department for settlement. These two plans will undoubtedly come about in the course of events.

Mr. Domoto also stated that attempts will be made by his committee straighten out names of plants in dif-ferent parts of the United States. The first attempt of this kind will be made with a similar organization in Georgia. Each organization will ship to the other flowers of shrubs and plants when they are in bloom, so they can be identified under their known names in each vicinity, and then action will be coordinated to have the proper names attached to the plants in two localities. This is a forerunner of the work the committee has planned. Mr. Domoto re-quested that the members of the California association hand in to the committee the names of any plants that are in dispute as to their nomenclature.

Ĥans Plath, San Francisco, who was to present a paper for the plants and flowers committee, was unable to reach the convention the first day, due to a breakdown of his automobile at Santa Barbara; in his absence, his paper on the outstanding new varieties of the year was read by J. R. Crombie, Oak-land, one of the committee members.

A. W. Emslie's report for the transportation committee was read by J. D. Meriwether, of the state nursery service department. Mr. Emslie requested that all requests made by the various nurserymen for freight reductions be sent to the committee first, to save time. His report stated that every request had been granted.

M. R. Jackson, Fresno, in his report for the viticulture committee, showed that there has been a marked increase in the production of grapes in the past five years and that conditions vastly improved. At the present time, the vine hopper, which did so much damage in the past, has about disappeared.

W. H. Wright, of the Los Angeles administrative office of the state department of agriculture, spoke for A. A. Brock, the head of the department, as Mr. Brock had been suddenly called to Washington. Although the present legislature codified the forty-five acts and the 700 separate sections that the department has to work under, it turned around and added 146 new sections and amended 146 others, so that the department instead of having work somewhat simplified now has eleven new functions, which will keep it busier than ever.

Mr. Wright's talk closed the Thursday meeting. The San Diego commit-tee made arrangements with the California-Pacific International exposition so that all the nurserymen might present their registration badges for admittance to the fairgrounds for the evening. This was a worth-while trip, for it gave the visitors their first opportunity to see the great trade exhibit gardens that had been installed there by the horticulturists of California.

President Hartman opened the meet-

ing September 27 by calling on J. D. Meriwether, of the state nursery ser ice department. Mr. Meriwether stated that the new nurserymen's directory. which is issued annually by the department and which is just off the press. shows what a job his department has, for there are 2,333 regular licensed nurserymen in the state of California and 1,023 branch nurseries. With the few employees available, the department had made complete inspections of 716 nurseries and had contacted 725 others. The worst pests found in the inspections were mealy bug and nematode. It was the speaker's belief that the demand for fruit trees will take up all available stock and that ornamentals are a little ahead of the demand. At the request of the citrus producers, the department had made a complete cost survey of the twelve leading citrus nurseries.

Some trouble has been experienced with a new disease in the Beaumont district on peach trees; 17,000 trees were condemned last year, and the problem was turned over to the United States authorities and the state university for investigation. So far, a decision has not been reached relative to the disease.

#### Friday Program.

The Friday morning attendants at the convention had in store for them talks by other authorities. One was an address by H. H. Keifer, assistant systematic entomologist of department of agriculture, entitled "By the Bugs' Whiskers Ye Shall Know His paper was prepared in Them." His paper was prepared in such a pleasant, understandable man-ner that even a layman could enjoy it. Mr. Keifer said that of about 2,000 different kinds of bugs found in California, only three or four per cent are harmful. He said that the best way to become acquainted with bugs is to know all of them and then find out something about the harmful ones. Many bugs that turn out to be pests and are thought to be introduced into this country from other countries are often found here on native plants. This was the case recently, when a new pest was discovered on evelamen bulbs that had been shipped into the country. In the high Sierras, where the azaleas and rhododendrons bloom in abundance, he found a pest that was able to destroy the blooms with great rapidity. So far these pests have not been found in the lower regions.

#### Tells About Parasites.

The second speaker Friday morning was Harold Compere, entomologist assigned by the government to the citrus experiment station at Riverside, although for many years he has not been He has been one of Uncle Sam's wanderers, studying pests in Australia, China, India, South America and South Africa with the hopes that parasites could be found that would eventually attack the California red scale.

In nearly all of the countries mentioned he found five or more pests working on what his predecessors had classified as the California red scale, but upon closer examination did not to be so. The parasites that worked on the red scale of these other countries worked on the yellow scale of California. After many years of work he found parasites that are doing some work on the California red scale, but not to any great degree. In Brazil he located seventeen parasites that worked on the common black scale. Three of the nine pests that infest the citrus orchards of California have been controlled 100 per cent, and the rest are controlled. From situation, Mr. Compere wandered into descriptions of the plants and locali-ties that he had visited, and if the convention members had had their way, he could have talked for hours.

Roy Wilcox, chairman of the resolucommittee, introduced a resolution that was passed by the convention to oppose the unfair competition given by nurseries conducted by municipali-ties, counties, states and the federal government.

he bu ter No

as

808

the

gr C.

Ka

Sta

en

tha

est

ho

the

ths

far

as

err

no

fro

beg

on

the

dan

mir

cou

ext

hel

usu

one

she

kno

acc

the

ser

of

19,

bei

88.V

fee

pro

tree

plan

are

eith

ing

fen

figu

set

belt

L

1

#### Soil Erosion Discussed.

R. R. McLean, agricultural commissioner of San Diego county, read a paper on "Soil Erosion," in which he recommended among other things to prevent soil erosion the following: ows, cottonwoods, eucalyptus, locust, Bermuda grass, salt grass, salt bush, Kudzu vine and practically all the California native shrubs, such as the rhus and ceanothus.

Theodore Payne, Los Angeles, who was on the program for Thursday, Sep-Angeles, who tember 26, arrived the next day and read his report on "Native Plants." A shrub that Mr. Payne recommended above all the others is a yellow-flow-ered gooseberry that he found in the high Sierras in Kern county; in Mr. Payne's belief, it is a coming rock garden plant, as it has a tendency to spread out in a low-growing form and has fine foliage and blooms. also spoke of a native garden that he had worked on at the Carpentira school which possessed 126 species, representing twenty-six families. He advised all nurserymen to visit the two great native botanical gardens—the Ranch Santa Ana, in the Santa Ana canvon between Olive and Corona, and the Blakely Gardens at Santa Barbara.

Two fine talks were given on "Cash and Credits" and "Developing Markets for Nursery Products." The latter was given by Fred G. Swartz, of the Barnes-Chase Co., and the former was by C. D. Collom, of the Central San

Diego Credit Association.

Lewis A. Walmsley, of the Soledad Rock & Water Gardens, Pacific Beach, addressed the assembly on "The Use of Succulents in Landscape Work." His talk was so full of meat and had so many technical names that the conven-tion went on record to have the ad-dress printed for future use.

The final talk of the business session was given by that widely known and celebrated California horticulturist, Miss Kate Sessions. She spoke fluently on the subject of "The Commercial Plant Industry as a Vocation for Miss Sessions' first and last Women." bit of advice to the many women in the audience was to be a specialist. She discussed several types of work that she thought women are especially suited for. First was the propagation of small plants in quantities, because this work can easily be done by any woman; second was landscaping, and third was specializing in one or two plants. Above all things, she advised women to stay out of general nursery work as proprietors, as the labor involved is entirely too hard for the average woman.

LAN

zil he

ee of citrus con-

t are pest into

oeali-

f the

way,

esolu-

ntion

given ipalideral

nmis-

ad a

h he

Wil

black

y all

who

Sepand " A

ended

·flow-

y; in rock

ey to

and

ntira

rep-

e adtwo the

Ana, and bara.

rkets was the

Was.

San

ledad

each.

se of

His

nd so nvene ad-

ssion

and urist, ently ercial

for

last

en in

alist.

work cially ation cause any and

vised

rsery

r inaver-

at

38

### **Kansas Autumn Meeting**

Annual Fall Get-together of the Kansas Nurserymen's Association Featured by Interesting Talk on Great Plains Shelterbelt Project

KANSAS NURSERYMEN MEET.

Elect Officers at Salina.

The Kansas Nurserymen's Association held its annual fall get-together and business meeting at Salina, Kan., September 26. A. E. Willis, of the Willis Nursery Co., Ottawa, president of the association, presided at the business sessions. Ralph Ricklefs, operator of the Salina branch of the Kansas Evergreen Nurseries, Manhattan, was host. C. A. Scott, regional director of the Kansas shelterbelt project, and Prof. George A. Dean, state entomologist and a member of the faculty of the Kansas State College, Manhattan, spoke. Present at the noon luncheon were more than thirty members and others interested in the trade from Kansas, Oklahoma and Nebraska.

ested in the trade from Kansas, Oklahoma and Nebraska.

In his talk on the shelterbelt project, Mr. Scott gave a short review of the purposes of the belt and explained that in individual cases the belt is a farm shelterbelt and its arrangement is dependent on the farmer on whose farm it is to be put and the needs of the region where it is located. He gave as an example of this that in the northern states the belts are usually on the north and west of the farm, to protect from the cold winter winds coming from those directions. In the south, beginning in Kansas, the belt is usually on the south and west, for it is from the south that most of the winds come damaging the spring crops and causing the spring dust storms. Also, in the late part of the summer, hot winds from the south sear the row crops.

#### Size of Shelterbelt.

The size of the belt, of course, depends on the amount of land the farmer operates. However, the standard width is ten rods, and no belt will be put in narrower than that. The minimum length is eighty rods, and of course, if the line is longer, it will be extended to the end of the farm. A belt ten rods wide and one mile long covers twenty acres. This is the unit usually planned, most farms being of one or more sections in area in the shelterbelt zone, as that territory is

The terms of planting now in effect, according to Mr. Scott, do away with the renting of the land by the forest service. Instead, that land which is out of production on account of the A.A.A. is, by arrangement with the A. A. A., being located where the trees are to go, saving the forest service the rental fees and making more of the money provided for this service available to tree planting. After the trees are planted, the farmer on whose farm they are put must protect them from stock, either with a strong fence or by herding. Herding saves the cost of the fence and fencing, no small item when figured in miles.

Last year, over 250,000 trees were set out. They are so planned that the belt will be low on the sides, protected by shrubs and built up in the middle of the 10-rod belt to cottonwoods. Trees between the shrubs and the cottonwoods are American elm, Chinese elm, oak, locust and red cedar. Such a belt, according to Mr. Scott, will shoot the winds up and over the fields for a mile; so if each section is so planted, the dangers from the open sweeps of wind will be eliminated. In addition to preventing dust storms and conserving moisture, the shelterbelts will provide picnic and party areas in the otherwise almost treeless areas, will provide firewood in time and also will act as game refuges where they are wanted. The project is planned on a 20-year basis or longer.

This year it is estimated that 5,000,000 trees will be set out, as there are about that many seedlings in the nurseries in the region. Only trees of a standard size and produced in certain areas where the climatic conditions are similar to these where they are to be grown will be used. If more trees coming up to specifications were available, Mr. Scott said, more would be put out next spring.

next spring.

One interesting point brought out in the talk by Mr. Scott was the method of determining where this belt will go. He said that it is yet subject to change east and west a little. It runs north and south from the Canadian line to a little south of the Red river. It was stopped there because below that point the land is all in pasture and there is no need for the shelterbelt zone to be extended to the Mexican line. The belt is 100 miles wide. The east line is, therefore, any point 100 miles east of the line selected for the west line, which is not just a line drawn north and south at some special point, but is a wavering line, determined by the point farthest west for the growing of trees, soil, moisture and other conditions considered, so far as present

A. E. Willis.

knowledge of tree growing is con-

The talk by Prof. George A. Dean concerned the insects which have been most troublesome to the trees of the state in the past year. Two pests were described, both of them newcomers, so far as economic importance is concerned, in the state. One is the flatheaded apple-tree borer, which is becoming so numerous in the state that it is attacking every kind of tree yet examined and occurring in such numbers that as many as 2,000 have been taken from individual trees over the state. The other is the two-spotted mite. The mite is so similar to the red

spider that it is often confused with it. Professor Dean said that there is but one practical method of overcoming the flat-headed borer—that is to destroy all trees acting as host to the plant. This means cutting dead and dying trees out entirely and removing many of the branches of the other trees. He said that this wood must then be burned. In many cities over the state, relief labor is being used for this work, and he recommended the practice be extended. The wood is good for firewood, and if the wood is good for firewood, and if the wood is so used before May of next year, the borers will be destroyed before they are ready to emerge for the attack next spring. He added that unless this is done, there is a serious problem confronting the nurserymen of the state, for the trees already weakened from two years of extreme drought will not be able to resist further attacks of the borers.

the state, for the trees already weakened from two years of extreme drought
will not be able to resist further attacks of the borers.

The two-spotted mite is a serious
pest, too, he said, but not so serious
as the borer and much more easily
controlled. It can be controlled by
spraying, using either a one per cent
oil spray, a weak summer-strength limesulphur spray or sulphur dustings. He
warned that this should be done, for
the drought has weakened all trees and
continued defoliation by the mites will
hurry the end of many trees.

#### Election of Officers.

The business meetings were short and to the point. A change in the by-laws, whereby the annual business meeting will hereafter be held in conjunction with the meetings of the Western Association of Nurserymen, was ratified. The nominating committee offered a complete slate of one candidate for each place, and this was unanimously accepted and the officers were elected by acclamation. The nominating committee was composed of Robert Scott, of the Kansas Evergreen Nurseries; C. D. Wagoner, of the Wagoner Nurseries, Hutchinson, and J. H. Skinner, of J. H. Skinner, of J. H. Skinner, of J. H. Skinner, of J.

the Kansas Evergreen Nurseries; C. D. Wagoner, of the Wagoner Nurseries, Hutchinson, and J. H. Skinner, of J. H. Skinner & Co., Topeka.

The officers for next year, who took office immediately on election, are: President, J. W. Nevins, of the Blue Valley Nurseries & Orchard Co., Blue Rapids; vice-president, Ralph Ricklefs, of the Kansas Evergreen Nurseries, Salina; secretary-treasurer, J. Frank Jones, Lawrence (reëlected), and executive committee, Harold Crawford, of the Willis Nursery Co., Ottawa; R. G. Griesa, of the Griesa Nurseries, Law-

rence; Ralph Skinner, of J. H. Skinner & Co.; George Chandler, of the Chandler Landscape & Floral Co., Kansas City, and Andrew Matzeder, Leavenworth.

#### Tour of City.

After the business meeting, a bus trip was taken about the city. Salina is highly park-conscious, due to the efforts of Mr. Ricklefs, who has designed two large parks for the city and is planning a third and more elaborate park area, which may be built up as a P.W.A. project. The parks are all large, well located, well planned and well kept up and would be a credit to a city many times larger than Salina.

In addition to its parks, the city has planted and maintains beautifully all of its public buildings. The country club district of the city was also visited on the tour. Here individual landscaping jobs were pointed out, and the condition of various kinds of plant materials was discussed. It was a val-uable study for the nurserymen, showing what can be done with grass, as well as shrubbery and trees, on the edge of the plains, and was an object lesson to anyone interested in home or city beautification.

The group broke up at the office of Mr. Ricklefs, resolved that he was an excellent host and an excellent land-scape architect and nurseryman. The feeling among the nurserymen present was one of optimism for the coming year, everyone expressing the thought that prices will be good or at least better. All stated that the past year showed an improvement in the demands for stock, with good prices for the better quality material.

#### NORTH JERSEY MEETING.

A special meeting was held by the North Jersey Metropolitan Association of Nurserymen at the county court-house in Hackensack, N. J., Wednesday evening, September 25. An application for membership was received from J. A. Sedgewick, Glen Rock, N. J. The chairman of the planting committee gave his report on landscaping the courthouse in Hackensack.

The secretary then read a communi-cation received from the board of cation received from the board of chosen freeholders, also one from the agricultural agent in Bergen county, pertaining to the landscaping of the courthouse. A list of material needed for the landscaping was submitted to the members and the stock was imme-diately provided. It was then decided that all would turn out at 8 a. m. Tuesday, October 1, to do the job.

A discussion was heard on the quality of landscape work used by real estate men to sell homes and how it hurts the nursery business in general.
Mr. Stone, Bergen county agent, promised to contact a local real estate board and make an appointment for the association to send a committee to one of the board's regular meetings and ex-plain the difference between a real landscape job and the type now being

The subject of the "Monthly Visitor" was brought up. This is a booklet published by the association each month for the membership to mail out to cus-tomers, calling attention to proper times to spray and giving timely hints about the care of the garden. The president appointed a committee of five to compile the material to be used for one year, allowing one blank space for the member to print in what cares to regarding new diseases or in-sects and their control. This material will be ready for the mail starting February, 1936.

An amendment to the constitution that all new members present at least three satisfactory trade references with their application for membership was then passed.

The president then read a copy of the act which prohibits the sale of bittersweet.

Dr. R. P. White, New Brunswick, complimented the president on the way the meeting was conducted. He said he feels it is a group of men who are going some place and doing things for the trade in general. He was particularly interested in the way in which the association is trying to educate the public. He gave an interesting talk on the methods of disposing of diseased trees and discussed twig blight on chestnut and oak and how to cope with The use of an airplane for dusting a large wooded area was described. After answering many questions, Dr. White was voted an honorary member of the association.

William Halliev, Sec'v.

#### NORTH JERSEY LADIES' NIGHT.

September 11, the North Jersey Metropolitan Association of Nurserymen held a ladies' night. The group met at the nursery of Kievit & Son, Hawthorne, N. J., and from there went to the Villa La Fayette, for a gettogether dinner. After the dinner, short meeting was held to discuss the planting for the Courthouse at Hacken-N. J. It was decided that the planting committee go before the free-holders and report at the next executive meeting,
William Hallicy, See'y.

#### ST. LOUIS LANDSCAPERS MEET.

The St. Louis Landscape and Nurserymen's Association held its monthly meeting September 9 at Clayton, St. Louis county, Mo., in the Clayton Courthouse. President Ludwig Baumann presided over the large attendance. Among the important matters up for action was that concerning the state highway commission, which has established a nursery at Gray Summit, where thousands of young trees have been planted for disposal to the state for highway planting. În order to make an effort to stop this practice and prevent the commission from entering into competition with nurserymen in the sale of nursery stock to the state a committee was appointed to present the grievance and an appeal to various floral organizations throughout the state, such as the Missouri State Florists' Association, the Kansas City Florists' Club and the St. Louis Florists' Club.

The annual election of officers resulted as follows: President, Joseph Houliban; vice-president, H. C. Moskopf; secretary, Carl Giebel, and treasurer, Charles Full-graf. The new officers will be installed at the next meeting, October 14. The grievance committee was requested to begin work at once and to report anything of importance at a special meeting, if necessary.

#### MASSACHUSETTS FIELD DAY.

#### Inspect Plantings at Waltham.

Members of the Massachusetts Nurserymen's Association held a pleasant field day the afternoon of September 10 at the Waltham market garden field station of the Massachusetts State Coilege. They were favored with delightfully clear and warm weather, after a rather long rainy spell. About twenty members attended, and an inspection of the plantings of hardy perennials and annuals was first made. There is a test block of over 150 varieties of hardy asters, many of which were in flower, including some of the new, dwarf, Eng-lish varieties. There was also a large planting of kniphofias obtained many sources, as well as a fine selection of phloxes and other hardy plants.

e is

a is r

e:

q

01

se h:

88

ti

in

m fo

th

of

th

in

it

pl

in

ma

on th

19 to

ne ma

mi

vel

ma sto

of

wa

ter

det

sto

pla

are

teir fou

mai har

inst

are hole

less

wat

ture A plan

In the hardy flower borders was noted some of the late-flowering type of Lilium formosanum of remarkable vigor, but the plants were not yet in flower. There was a large selection of China asters and other varieties of annuals, while in the greenhouses were plantings of gardenias, carnations and chrysanthe-mums being tried out with various soils

and fertilizers.

Following the inspection, the members assembled in the Administration building, to which a fine addition is being built. One of the new rooms will make an admirable meeting place, accommodating seventy-five persons. This has been made possible through a recent grant from the state legislature which nurserymen fought for, and now they will be able to have testing, research work and other important matters pertaining to the industry taken care of through Richard T. Muller, who was re-cently placed in charge of the nursery department there.

A short business session was held, with President W. N. Craig, Weymouth, calling the meeting to order. He outlined work of benefit to nursery interests that is now possible through the new additions under way. He stressed the necessity for growers' holding to their catastty for growers' holding to their catalogue prices and not selling stock at ruinously low figures through roadside stands and dry goods houses. The outlook is distinctly good this fall for increased trade, and members should all do a better business than in several

years, he said.

The president then introduced Richard T. Muller. Mr. Muller spoke interestingly of things he hoped to accomplish which would stimulate buying by amateurs. He handed out lists of hardy woody plant material that he felt might be used. This list was discussed frankly by the members, and quite a number of helpful suggestions were made. As there are sixty acres of land at Waltham, ample space can be given to the nurssection, apart from that needed by market gardeners and florists, Mr. Muller said. It was suggested that a committee of nurserymen might look over the land and suggest how plantings

might best be done, having the future in mind. This found acceptance.

Prof. Ray M. Koon, director of the station, thanked the members for coming and pledged the whole-hearted cooperation of the field station staff in solving nurserymen's problems. Many fine recommendations were made by Edward W. Breed, South Lancaster; Winthrop H. Thurlow, West Newbury; Christian Vander Voet, Taunton; H. P. Kelsey, Jr., East Boxford.

IN

7.

ura-

ber

coi-

and

rdv

ver,

ing

rge

rom

ted

of

gor,

wer.

als,

the

poils

ild-

eing

ake

mo

hich

hev

reh

per-

sery

with

eallined

that

ddi-

ces-

ata-

side

out-

in-

all

eral

ter-

by

ight

r of here

dul-

over

ing

the

com

eo-

Ed.

Win-

### **Maturity of Nursery Stock**

Especially Important at Digging Time, the Subject of Plants' Maturity Is Discussed by H. B. Tukey, of New York Agricultural Experiment Station

As it draws near digging time, the old bugaboo is here again—namely, whether to wait until the nursery stock is a bit more mature before digging or whether to dig early and get the stock under cover. And so the question of maturity is properly raised and becomes worthy of some attention. Furthermore, it becomes an important consideration not alone with reference to the stock that is to be dug this fall, but also with reference to the stock that is to be carried through the winter outdoors. The last few winters have served to emphasize just how important the maturity factor really can be.

Maturity is, of course, only a relative term. It means nothing by itself, because, obviously, maturity of seed, of fruit and of a bearing fruit tree are quite unlike. A seed is said to be mature when it is in a more or less quiescent, or dormant condition, when it can be separated from the mother plant and handled as an individual. A fruit is said to be mature when it is in condition to pick from the tree and be moved in commerce. An apple tree is said to be mature when it has reached a condition for full cropping. Likewise, a pea for the canner is mature when it is quite green, yet mature for the seedsman when it is dry and hard.

In nursery circles, a plant in the fall of the year is said to be mature when the wood has hardened and when it is in good, vigorous condition to withstand winter cold. Because the wood is hard it does not necessarily follow that the plant is properly matured; it must be in good vigor, as well. The processes of maturity begin, therefore, back with the onset of the growing season and extend throughout the season until fall. This is a point worth emphasizing, because too often there is a feeling that hardness of the wood in itself constitutes maturity.

#### Fundamentals of Maturity.

A plant, of course, is composed of millions of tiny cells. As the plant develops during the growing season it manufactures food in its leaves, and this food is used for growth and for storage in various cells in different parts of the plant. The structure of the cell walls and the kind and amount of material in the living cells of the plant determine its ability to withstand winter cold. In the case of young nurser stock, practically all the cells in the plant are alive.

The foodstuffs found in plant cells are largely sugars, starch, fats and proteins. Well matured wood frequently is found to contain an abundance of starch, as well as certain sugars and materials usually found associated with hardiness. It is not of great concern just what these materials are, but they are characterized by their ability to hold water. The plant thus contains less free water and less easily gives up water when subjected to low temperatures. This situation is called hardiness.

tures. This situation is called hardiness. Accordingly, it can be seen that a plant must be kept in good vigor during the growing season if it is to be

able to manufacture the foodstuffs which give hardiness to the cells of which it is composed. Too often this fact is overlooked by nurserymen until the damages of winter are upon the plant

During the coming winter, it would not surprise the writer if there should be considerable injury to certain classes of nursery stock, due to insect and disease attacks this past summer. Slugs, for example, have been active and have defoliated some blocks of pears and cherries. In July, the writer counted twenty-seven slugs thriving on one small pear tree in one nursery, so that by the middle part of August there was scarcely a square inch of vigorous foliage to manufacture the foodstuffs necessary to bring the tree into proper maturity.

Likewise, apple scab can be a real factor in preventing the accumulation of materials in growing apple trees, and leaf spot on cherries is an admittedly serious factor.

To illustrate the point further, some microscope sections made of pear roots from two different sources showed some amazing differences. In one case the roots were packed with starch grains so that when the thin sections were stained with iodine the blue staining of the starch gave an almost black appearance. On the other hand, sections from another lot of roots showed a starved condition. The sections were clear and translucent, showing absolutely no reserves of starch or other storage materials. Such wood, although hard, was in no sense properly matured and would be unable to stand winter cold.

#### Injurious Effect of Defoliation.

Some of the difficulty with Mazzard seedlings is traceable directly to this factor of maturity. Mazzard seedlings, unless properly sprayed or unless the season is favorable, are likely to develop leaf spot so severely as to be entirely defoliated before they have properly matured. Mahaleb seedlings, on the other hand, are less subject to leaf spot and usually go into the winter in good condition. Where Mazzard stock is kept vigorous and growing, it will give a good account of itself in all but the severest winters. The same situation applies to roses. Too often, foliage is attacked by disease and lost before the wood is well ripened. Winter losses traceable directly to this condition are common knowledge, and case after case can be cited.

The moral is to keep the foliage on the plants during the growing season and to use such cultural practices as will promote vigor and good foliage development. Spraying is, of course, a difficult job in the nursery; yet, many nurserymen would be rewarded by a little more attention to the matter. A weak Bordeaux mixture, with arsenate of lead added for chewing insects and nicotine sulphate for sucking insects, is exceedingly useful for many nursery plants. The writer has called Bordeaux mixture "the nurseryman's friend"; truly it is. Not only does it go a long way in controlling leaf spots and plant

diseases in general, but it acts, too, as a splendid repellent for leaf hoppers, slugs and a dozen other troubles that appear from time to time.

#### Test with Immature Cherries.

That this ripening of the stock is really important is shown by an experiment conducted with Mazzard seedlings. One row of stock was stripped of leaves September 1; another row was stripped of leaves September 13, and a third row was left with good foliage, protected from leaf spot by spraying with Bordeaux mixture. Neighboring unsprayed blocks were slightly defoliated by leaf spot. An early fall freeze damaged the stock in direct proportion to the earliness and degree of defoliation. That is, the stock from which the leaves had been stripped September 1 was stilled outright. The stock which was stripped of leaves September 13 was killed outright. The unsprayed blocks that had lost some leaves from leaf spot were killed back approximately six to eight inches, whereas the sprayed block was not injured one particle.

That the sprayed block should not have been hurt at all seems scarcely credible, yet such was the case. One wonders how much loss in roses, sweet cherries, Mazzard seedlings and pears is due to insect and disease attack—even to a degree which seems small and insignificant.

#### The Problem of Unripe Wood.

The other side of the picture is failure of the wood to ripen in the fall because it is kept in a growing condition by cultural practices or unseasonal climatic conditions. There is admittedly a danger in this situation, but by and large it is less likely to cause trouble than failure of the plant to manufacture and store sufficient materials of the proper kind to give cold resistance. In the case of a so-called immature plant, the injury is usually to the immature tips, so that when the tips are cut off the plant is little the worse, whether for sale or for another season's growth in the nursery. On the other hand, a plant which has had its vigor curtailed by loss of foliage is likely to be a replacement liability if offered for sale, or is likely to be seriously damaged by severe winter cold.

Then, too, soft and green tips offer a fine place for mildew and general fungous troubles in storage. Nothing takes the place, therefore, of the plant that has had a good, vigorous growing season and shows strong foliage, yet which slows down normally in a normal fall season and ripens properly. Generally speaking, the evidence points more to injury from reduced vigor than from too prolonged fall growth.

As for helping the plants to ripen the wood in fall, little can be done other than to cease cultivation in late summer and withhold nitrogenous fertilizers after the middle part of the summer. General climatic conditions of late fall rains and warm spells are be-

yond control. Some growers feel that potash is helpful in maturing the plant. Evidence on this point is not conclusive; yet, there is just enough evidence lurking here and there to suggest that a well balanced fertilizer of nitrogen, potash and phosphorus is better than one containing just nitrogen alone. Perhaps it is not so much a matter of one element in itself as it is a question of balance between them.

#### MINIATURE HOME GROUNDS.

Reproduced on this page is a view of a model landscape development in miniature, one of the displays made by Holm & Olson. Inc., St. Paul, Minn., at the recent Minnesota state fair held at St. Paul. The exhibit was awarded a first prize and gained many favorable comments because of its design and construction, proving excellent publicity.

The prize list specifications called for a model covering 100 square feet or less. This model was made to a scale of three-sixteenths of an inch to one foot, and the total area of the exhibit was 8x11 feet.

By building up a rolling contour it was possible to provide an effective site for the house and develop other landscape features. In the lower left-hand corner, to which point the grounds are sloped, a lake is shown, and by this are a boathouse and diving board. In the water there were a number of live fishes, which added realism.

There was a fine opportunity to show a rock garden feature, and this was taken advantage of, while on the level area near the house a flower border and a summerhouse added interest. The service area, including the clothes yard and such features, was planned directly back of the house.

All the plant materials used were growing, each item being carefully selected for the proper scale. Miniature figures, both of humans and animals, and lawn furniture were used in the model. The design and work were supervised by P. G. Bass, one of the landscape architects associated with the firm.

### **Mail Order Meeting**

National Mail Order Nurserymen's Association Discusses Prices at Two-day Session at Chicago

A two-day session of the National Mail Order Nurserymen's Association was opened at the Sherman hotel, Chicago, October 2, with an attendance of more than a score of members. Eiden H. Burgess, of the Burgess Seed & Plant Co., Galesburg, Mich., president, presided over the informal discussions that marked the first day's program. It was the second such meeting held prior to the annual fall meeting of mail order seedsmen in the same city.

The matter of prices of nursery stock gained most attention. It was brought out that the public is paying higher prices for items in almost every other line and is steadily becoming more critical of quality and less of price. Response to early fall catalogues indicates the demand for the better merchandise is away ahead of last year's. It was intimated that now is the time to get profitable prices on specialty merchandise in the catalogue.

#### Prices Based on Costs.

Considerable discussion developed on the need of basing prices on costs rather than on the figures of competitors. It was stated and confirmed that different nurserymen's lists seldom are in competition with each other. Tests have shown that there is likely to be less than ten per cent duplication of names on firm mailing lists, even in rather restricted areas. It was also declared that the small groups where duplication of mailing occurs are likely to be steady customers of a firm and not often to be swayed by price differences.

As at the meeting last fall, there was debate on the advisability of guarantee clauses in nursery catalogues. The consensus was stronger this year that unrestricted guarantees are not good business. The experience of several of the members showed that replacement costs

had a habit of mounting rather steadily, with clear indications of chiseling on the part of the complainants. The members who had discontinued the practice of unrestricted guaranteeing declared the unfavorable reaction of their customers was negative in importance.

des Rol and cat lia

lari des

S tail and

pricand ing Osn shru

G

tail ard type and state

whole offer eral cherrifor to time for prune peren hard; packet are a

Fretail

for a seeds offere and b

plant ery i under dower

catalo as al

cially as the A hal mention

sale to well a tensive liningevergre conifer tipped of which the brooms

Stabl listing includia

Verhisale pri teprese plement the rare many of the nur stock.

Naugi mle pri form, e stock is m mult

Conardescribit and list:

Willis price III trees, e and sup

being a fered. A

D. & Md.—Ge alpine p The cata in alpha are Ane asters, in liger, Kethree new violas, d

Boyd 1 trated ci lescribing

Reports from the Michigan growers suggested that the current season's crop of strawberries would be about two-thirds that of last year. Farther west, about normal conditions prevail. Continued firm prices on fruit items seem likely, according to the remarks.

The second day was scheduled to be devoted to the further discussion of catalogue prices

catalogue prices.

Among those noted in attendance were the following:

were the following:

M. R. Showers, Yankton, S. D.
Elden H. Burgess, Galesburg, Mich.
Benjamin Greening, Monroe, Mich.
Howard Chard, Fainesville, O.
D. B. Cole, Painesville, O.
B. C. Becker, Western Sørings, Ill.
B. J. Monahan, Romeo, Mich.
William Schriver, Shenandouh, Ia.
Feet Keith, Sawyer, Mich.
J. J. Grullemans, Mentor, O.
G. Baldwin, Bridgman, Mich.
Ralph Emlong, Stevensville, Mich.
F. C. Stahelin, Bridgman, Mich.
C. H. Andrews, Faribault, Minn.
Robert Ackermann, Bridgman, Mich.
John Good, Springfield, O.
Mr. Brudley, Caroondale, Ill.
Harry Matter, Monroe, Mich.
An interesting exhibit at the meeting
was a vase of Buddleia Fortune, from
the Wayside Gardens Co., Mentor, O.

An interesting exhibit at the meeting was a vase of Buddleia Fortune, from the Wayside Gardens Co., Mentor, O. This new variety, having lilac-colored blooms, is in process of being patented. It was described as being of more erect growth than other buddleias. Another point of merit mentioned was the fact that Fortune blooms more freely than other buddleias and the blooms keep exceptionally well when cut.

#### RODENT REPELLENTS USEFUL.

Taking precautions to prevent damage to orchards from rabbits and other rodents is one of the important tasks of the fruit grower in the late fall. Rodents, through their injury to the bark, cause the death of thousands of trees each winter. Some growers use wire guards to protect the bark. Others wrap the lower part of the tree trunk with heavy paper. Many orchardists, however, are finding that the modern chemical rodent repellents supply the cheapest insurance. The cost of these products is small, and the ease with which the materials can be applied to the bark lowers the labor expense to a minimum.

Providing protection, especially to young trees, against the girdling depredations of rodents is a clear situation where an ounce of prevention is worth a pound of cure, orchard experts agree. Time taken this fall to apply a repellent or follow one of the other suggested practices may save the loss of valuable trees or the expense of bridge grafting next season.

T. KIYONO, Crichton, Ala., returned from Japan recently. He reports that he found general business conditions far better in the orient than in this country.



Model Landscape Project Exhibited by Nursery Firm at State Fair.

ily,

the

ing

im-

rop

est, on-

nee

rom O,

ted. rect ther fact

eep

am-

asks

fall. the s of

use hers unk

dern

the hese with

d to

pre-

tion

orth

sugs of idge

that

far

#### CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in The American Nurseryman.]

Longview, Crichton, Ala.—Price list No. 72 R, describing several lots of camellias offered by Robert O. Rubel, Jr., and giving prices on these and other varieties listed in the firm's regular catalogue. Considerable space is given to camellia collecting as a hobby.

Little Tree Farms, Framingham Center, Mass.—"Timely Hints for Fall Planting," being a large, descriptive circular, copiously illustrated, describing materials for fall landscaping efforts. Evergreens, bulbs and perennials are listed.

Smith's Bulb Gardens, Clarkston, Wash.—Retail listing of perennials, small shrubs, roses and bulbs. Special fall prices are given.

Le-Mao Special rain prices are given.

Le-Mao Mursories, Hampton, Va.—Wholesale price list of azaleus, broad-leaved evergreens and lining-out stock. Among the many interesting items are Helleborus niger, several hollies, Osmerea Burkwoodli, a new compact evergreen shrub from England: Layland's firethorn, and named varieties of ceanothus.

Glendale Farms & Gardens, Perry O.—Wholesale price list of Lilium regale and Lilium tenuifolium in bulbs and seeds. Complete cultural data are included.

Northbrook Gardens, Northbrook, Ill.—Fall retail list of peonies and irises. Besides the standard varieties, there are large groups of special types, such as the Japanese and single peonies and the intermediate and dwarf irises. A note states wholesale lists are available to the trade.

Mount Arbor Nurseries, Shenandoah, Ia.—Fall wholesale trade list, dated September 18, 1935, offering a large and complete assortment of general nursery stock in various grades. Flowering cherries are well represented and recommended for trial. The evergreens are described as three-times transplanted, grown with plenty of room for development and properly sheared and pruned. The rose list is extensive, and in the perennial list particular attention is given to hardy chrysanthemums and to phloxes. Bulbs, packaged perennials and nurserymer's supplies are also offered.

Fruitland Nurserios, Augusta, Ga.—A 44-page retail catalogue, freely illustrated and notable for a variety of unusual materials. Bulbs, dower seeds, perennials, trees, shrubs and fruits are offered. Flowering shrubs are well represented, and broad-leaved evergreens are numerous. Native plant material is listed at the back. The nursery is said to be 79 years old, with 250 acres under cultivation. This is the first year a flower seed section has appeared in the catalogue.

D. Hill Nursery Co., Dundee, Ill.—Hill's trade catalogue of evergreens, attractively prepared as always, with helpful illustrations and well arranged pages. The descriptive material is especially valuable. Many fine items are included, as the firm is a leading specialist in evergreens. A half-dozen deciduous items for lining out are mentioned near the end of the catalogue.

mentioned near the end of the catalogue. Sherwood Mursery Co., Portland, Ore.—Wholesale trade list of evergreen trees and shrubs, as well as a few deciduous items. The lists are extensive and contain offers for both balled and lining-out sizes. Noted are a number of dwarf evergreens and many of special color. Some rare confers are included, among them being a creamitiped juniper and a blue creeping juniper, both of which are said to be of unknown name. Among the broad-leaved evergreens, azaleas, barberries, brooms and heathers are well represented.

Stabler's Rosegardens, Gresham, Ore.—Retail listing of 2-year-old, field-grown, budded roses, including a group of nine climbers.

Verhalen Nursery Co., Scottsville, Tex.—Wholesale price list, subject to change January 1, 1936, representing chiefly evergreeus, with a small supplementary list of deciduous Items. A number of the tarer items can be found, among them being many of the broad-leaved types. A note tells of the nursery's advantageous location for growing stock. No stock is sold retail.

Maughton Farms, Waxahachie, Tex.—Wholemale price list of roses, issued in mimeographed form, covering bush and polyantha types. The stock is described as grown in Texas and budded on multillora. No. 1 and 1½ sizes are offered.

Conard-Pyle Co., West Grove, Pa.—Circular ésscribing the firm's A.B.C. profit plan for agents and listing evergreen, rose and shrub specialties. A 4-color insert depicts Nigrette.

Willis Nursery Co., Ottawa, Kan.—Wholesale Mice list of nursery items, including shrubs, trees, evergreens, roses, perennials, fruit trees and supplies. Lining-out stock is mentioned as being available; forest tree seedlings are offered. A counter display box of tulips is featured on one page.

B. & C. Hardy Plant Mursery, Westminster, Md.—General wholesale list of perennials and alpine plants, including choice and rare items. The catalogue is neatly printed, the items being halphabeltical order. Nome of the specialties are Anemone japonica September Charm, new saters, including the border types; Helebous liger, Korean hybrid chrysanthemuns, including the present printed by the control of the contr

Boyd Nursery Co., McMinnville, Tenn.—Illustrated circular, printed by the offset process, describing materials for fall planting, including balbs, sbrubs, trees and fruits.

# Specimen Evergreens and Shade Trees

### From Our Own Nurseries

|      |   | Per 100  |
|------|---|----------|
| 5000 | Hemlock, 3-4 ft. sheared, B&B   | \$100.00 |
| 3000 | Juniperus Stricta, 15-18 in., sheared and compact   | 50.00    |
| 2500 | Douglas Fir, 4-5 ft., perfect trees   | 90.00    |
| 5000 | Thuja Pyramidalis, 4-5 ft., transplanted the past   |          |
| 5000 | Thuja Pyramidalis, 5-6 ft., transplanted the past   |          |
| 2000 | Thuja Compacta, 2 ft.   | 65.00    |
| 2000 | Thuja Wareana, 2-3 ft., bushy and well shaped   | 50.00    |
| 1000 | Thuja Boothii, 2 ft., the best of the globes  | 65.00    |
| 2000 | Mugho Pines, 2-21/2 ft., transpl. spring of 1934  | 90.00    |
| 2500 | Norway Maples, straight trunks; good heads; fine, fibrous roots; 10-12 ft.; 11/2-13/4-in. caliper | 125.00   |
| 5000 | Cornus Florida, good heads, straight stems  |          |
|      | 6-8 ft  | 100.00   |
|      | 8-10 ft   | 150.00   |
|      | 10-12 ft  | 200.00   |

### A. N. PIERSON, Inc. Cromwell, Conn.

Hoyt Nurserios, New Canaan, Conn.—A neatly printed retail catalogue, offering a general line of nursery stock, including trees, shrubs, vince, roses, fruits, berry-bearing plants, rock garden plants and bedge and windbreak materials.

Plumfield Nurseries, Fremont, Neb.—Wholesale list, extensive in scope, consisting of seventy-four pages and a cover and offering fruits, deciduous tree and ornamental seedlings, liming-out evergreens, the standard sizes in evergreen and deciduous items, shrubs, roses, perennials and bulbs, L. A. Moffet is manager of the nurseries.

Shenandoah Murseries, Shenandoah, Ia.—Lake's fall wholesale trade list, dated September 25, being a 64-nage listing of general nursery stock. Roses are especially well represented and include many of the new patented varieties. Flowering crabs are offered in variety, and the new patented barberries are featured. The perennial list includes exceptional values in the newer and rare varieties. Bulbs, aquatics, peonies and supplies are added groups in the list.

Gladwood Gardens, Copemish, Mich.—Folder listing unusual plants, some of which have never before been offered in this country, it is stated. Every item is said to be easy to grow with average care. Among the items are several arabises, globularias, Iris dichotoma, phloxes and sedums. A small group of perennial seeds is also listed.

Weller Murseries Co., Holland, Mich.—Herbaceous perennials for rockeries, hardy borders, wall gardens and cut flowers. This is a general list for the trade. The statement is made that good perennials are scarce this year. No advance in prices has been made, it is stated. Especially complete is the phlox list. Wrapped perennials are described for counter sales. A list of specime evergreens is attached, subject to a trade discount.

Cumberland Valley Burseries, Inc., McMinnville, Tenn.—Wholesale price list, of sixty pages, including an index, offering general nursery stock. Nursery-grown and collected stock are listed separately. Particular attention is paid to classifying the collected items, which include some unusual varieties. Native tree seeds and nursery-grown lining-out stock are given a place. Native plants are also represented. Enlargement of the firm's plantings this season is megationed.

Bobbink & Atkins, Rutherford, N. J.—An attractive fall catalogue of thirty-two pages, laid out in typical B. & A. style, with numerous colored illustrations, and a cover notable for splendid half-tone reproductions of specialties, such as tree peonies, eremurus, dictamus, Christmas rose and rugosa rose. Most space is given to roses in the catalogue, with hardy plant offers completing the list.

### **Winter Protection**

Practices in Nursery and Landscape Plantings for the Prevention of Mortality of Stock During Winter Months Discussed by L. C. Chadwick

It is not uncommon to find considerable mortality of nursery stock during the winter months. Its occurrence is most prevalent with young seedling stock, with recently transplanted material that has not become thoroughly established and with plants that are tender or unacclimated in the region. A better understanding of the factors determining the hardiness of plants and the observance of these practices in maintenance work will help to obviate much of the loss occurring.

As is commonly known, thoroughly mature tissues, those with a high carbohydrate content in relation to the nitrogen present, are more resistant to low temperatures than those in a less mature condition. Sun scald, in so far as it is a form of winter injury, is due, in some cases at least, to the higher temperature of the tissues on the south and west sides of the trunk sufficient to delay maturity. Other significant factors concerning the hardiness of the tops of plants lie in the facts that, in stems well matured, the pith is the least resistant of the tissues, followed in order by the xylem rays, sapwood, bark and cambium, and that vegetative buds are more resistant than flower buds. While little can be done to change these conditions, they do account for certain common occurrences in the variation of hardiness between different ornamental plants. Attention will show that most of those plants which nor-mally winterkill to some extent, such as Hydrangea arborescens grandiflora, buddleia and the like, are those that are characterized by having a large pith. Likewise, it is a frequent occurrence to find the flower buds severely injured on plants such as some of the magnolias and forsythias while the rest of the plant is uninjured.

The hardiness of roots presents other interesting factors. As a rule, roots are more susceptible to winter temperatures than tops. The factors most important in determining the degree of injury are

the type of soil and the nature of the soil covering. With fruit tree seedlings and stocks it has been shown that roots are less resistant in a light, sandy soil than in one of medium loam but intermediate in clay. Similarly, soils low in moisture tend to show a greater root injury than those containing adequate amounts. The explanation of this apparently lies in the fact that light soils and ones low in moisture usually show lower temperatures. Probably of more importance than the nature of the soil in determining the extent of root injury is the type of soil cover. Any material acting to prevent air movement at the soil surface protects it against loss of heat. Light cover crops and mulches furnish a means of diverting the wind from sweeping the soil surface.

#### Nursery Practices.

The foregoing discussion presents at least three important points, the nature regulation of which govern the hardiness of plants and which commercial practices may readily modify. These points are practices leading to normal maturity, the selection of soils and the provision of a suitable soil cover. It is, of course, realized that our ornamental plants vary greatly in their degree of hardiness. In so far as it is commercially feasible, it is well to select those plants for production and landscape use that are hardy in the locality in which they are to be used. It is not so much these predominately hardy plants as those that are inclined to be tender, at least during some stage of their growth, that interest us in this discussion. Many of the types that are hardy at maturity may be tender during the seedling stage.

Everyone dealing with plants has seen many examples of certain conditions leading to proper maturity. The most important of these are proper drainage, withholding of all fertilizers during late summer and early fall and stopping cultivation by early September.

Proper drainage should be provided to all plants so that only normal water is maintained about their roots. Plants in soils with excessive water or in soils which are exceptionally low in moisture are more susceptible to winter injury than those growing in soils with a normal water supply which favors the regular maturity of the tissues. Good drainage is particularly important with young seedling stock, as it is more susceptible to excessive variations in either direction than larger plants. Applications of superphosphate and root pruning, which tend to increase maturity, may be feasible under certain conditions, especially with valuable plants. All artificial applications of water to seedling stock growing under irrigation systems should be withheld late in the season.

a ct n gt li a o pb b y s

a with but a with a wit

ar er la ti

th

ha

th

m

The statement has been made before that roots of fruit stock seem to be less resistant in soils of a sandy nature. There is no discrepancy between this statement and the one to the effect that good drainage hastens maturity, but rather these two factors go hand in hand to produce hardiness of both tops and roots. Sandy soils are adaptable for seedling production because they provide conditions essential to seed germination and efficient culture. two statements do form the basis for certain cultural practices. While sandy soils produce ideal conditions for seedling growth in summer and by good drainage hasten early maturity of the tops, that may not be ideal for the best hardiness of roots in the winter. But certain fall practices will easily overcome any deficiency sandy soil has in this direction. These practices consist of supplying an adequate amount of water just before the ground freezes and mulching to retain this moisture and heat in the soil. Under intensive cultural conditions, as is common with most seedling work, these practices are easily accomplished and are inexpensive. Larger plants, being less suscep-

### MORE PROSPECTS FOR YOU

Early inquiries indicate that the autumn demand for stock will be heavier than for several seasons. A still greater upturn is expected in spring. Large dealers and catalogue houses already are seeking to locate sources of supply.

Now is the time to get the attention of as many prospective purchasers as possible to the stock you have to offer. The more contacts you establish, the greater your opportunity to cash in on this increased business.

An advertisement in The American Nurseryman listing varieties and sizes of stock will broadcast your offer to 3000 leading trade prospects.

Not only will this advertising bring inquiries from buyers not now on your mailing list, but it will make your price list mailing more productive.

American Nurseryman

508 S. Dearborn St. Chicago, Ill. ' Forms for Oct. 15 Issue will close Oct. 12.

ADVERTISING RATES
Page . . . . \$50.00
Half page . . 30.00
Third page . 21.00
Quarter page . 16.75
Smaller space,
per inch . 2.25

(Lower on term orders)

tible to both top and root injury, can be, and usually are, grown on heavier soils retaining more moisture.

#### Mulches.

The question of mulches brings us to the third important practice, that of providing a suitable soil cover to increase hardiness. It has long been a common practice to sow a crop of oats in early fall between rows of evergreens. Such a practice with small evergreens is especially desirable. Tests of this nature with deciduous fruits have been reported to be beneficial in increasing hardiness; normally such a condition is more important than the nature of the soil. It is a wise practice to sow the oats broadcast, being sure that the seeds fall close to the plant as well as between the rows. Such a crop of oats may act as a mulch over the soil surface, preventing loss of moisture and heat by sweeping winds, giving some protection to the plant tops, if the plants are small, during late fall and early winter and also affording a means of increasing the organic content of the soil. Such a practice should be continued for a number of years with evergreens and may be employed to some extent with the younger and more valuable deciduous stock.

In the propagation department, where the activities are more intensified, such a covering of oats may rightly give way to a regular mulch. Seedlings, cuttings and grafts handled in beds should be mulched at the approach of cold weather. As a general practice with such stock, the mulch should be applied after a few light freezes have occurred. With liberal moisture in the soil nothing is better for this mulch than granulated peat moss applied to a depth of about one and one-half inches. Peat moss has proved better than leaves, straw or lath half-shades for mulching such plants as Ilex crenata, pyracantha and abelia. Such a mulch should not be used with types of plants possessing a creeping or rosette habit of growth, as is frequently encountered in herba-ceous perennials. Here it is essential to use some type of covering, such as excelsior, which will not mat down. In large blocks of lined-out stock protection may be afforded by using straw or evergreen boughs. The latter are espe-cially desirable. Whatever type of mulch is used, it should be remembered that it should not be applied until the approach of winter weather or until the ground has even frozen slightly.

#### Protection in Landscape Plantings.

Since many nurserymen are engaged in landscape maintenance, it seems advisable to discuss the mulching and protection of landscape plants.

protection of landscape plants.

All plants, regardless of their hardiness, if fall-planted should be mulched the first winter. It is optional with the hardy plants after the first year. In many cases there is no doubt about the damage caused during the winter, but in others the apparent damage may be delayed until late in the spring or even midsummer. Such was the case after the severe winter of 1933-34. Plants may be only partly damaged, still retaining sufficient vitality to produce leaves and grow until the hot weather of summer. At this period the leaves shrivel and die, death of the branches following. Such damage is frequently attributed to other causes than winter injury.

### "PAINESVILLE NURSERIES"

SEEDS NO. SEEDS

### We are Prepared!

to take care of your orders from our large, complete assortment of

Fruit Trees, Grapes, Ornamental Trees and Shrubs, Evergreens, Roses, Perennials, Etc.

81 Years of Dependable Service

The Storrs & Harrison Company

Evergreen plantings should be adequately watered as cold weather approaches, so that the plants can go into the winter with a good supply of moisture. This is essential because the plants are subject to considerable drying out by the hard winds during the winter months.

During the first few years after planting, if the plants have not been mulched through the summer, it is well to put on two or three inches of well rotted manure or peat moss as cold weather approaches. This will help to maintain a uniform temperature around the roots and root activity will con-tinue later. With plants set in the fall it is advisable to mulch heavily around them after the ground freezes. Ten inches to a foot of leaves, straw or well rotted stable litter may be used. This should extend two to three feet beyond the spread of the roots. This may serve in furnishing some protection to the tops and stems against sun scald and drying out and in preventing continuous freezing and thawing of the soil. the warm weather of spring approaches, it is well to remove part of the mulch. The rest may be left, or that which was put on early can be incorporated in the soil.

The problems of the winter protection of deciduous trees and shrubs are largely those dealing with the protection of types that are not sufficiently hardy or acclimated to their new location. In mulching trees and shrubs, care should be taken to carry the mulch out as far as the roots of the plant extend. This mulch, which may be of peat moss, leaves, straw or well rotted manure, should be applied to a depth of about four inches and late in the season just before the ground freezes solidly.

Some of the deciduous shrubs that form dense, compact masses will need protection from snow. Snow may gather on such plants to the extent that the added weight will cause the splitting and breaking of the branches. Plants like the Japanese maple, the hypericums and some of the cotoneasters are often damaged in this way. With the larger plants, props beneath the branches are useful. With the smaller plants, tying the branches to stakes with strips of burlap is the best solution.

For some plants that are not entirely hardy and are located in exposed situations, it is best to supply a screen of some sort. This screen may take the form of a box or a fence, or be provided by placing evergreen boughs or cornstalks around the plants. A screen

ed to water lants soils isture njury northe Good

IAN

with more as in lants, I root aturation uable as of ander hheld

efore

this that but d in tops table they gerThese for andy for

the nter. asily has conount eezes sture asive with

good

penscep-

are

241.41

0

of burlap is sufficient in many cases. Screens of such a nature will protect the plants against strong, drying winds and the winter's sun. Frequently we and the winter's sun. Frequently we find many plants located beneath the caves of the house damaged by ice caused by the drip from the roof. The caused by the drip from the roof. The best means of protecting shrubs in such locations is to build sheds, without sides, to fit over the plants. Occasion-ally shrubs in such locations can be more conveniently wrapped with burlap or straw and bound with twine to prevent such injury.

Many of our roses require more winter protection than our other deciduous plants. The best method of protection for hybrid teas and hybrid perpetuals consists of banking each plant with soil to a depth of six inches after the first few frosts. Later, after the ground has frozen, a mulch of four to six inches of peat moss, straw or manure should be placed over the entire bed. The early soil mulch will have a tendency to keep water from collecting about the base of the plant. The bush roses, as the rugosas and the like, can be given the same protection as other deciduous shrubs.

#### Vines.

The use to which vines are put will, in many cases, determine the amount of protection needed. When vines and other climbers, such as roses, and espalier trees are growing against a wall with southern or western exposures, they should be protected by a burlap covering. Plants in such loca-tions are subject to the full effects of the early spring sun and higher temperatures. Activity in the tissues of the plant is easily started under such conditions. A subsequent cold spell is sure to cause damage. Tender vines, such as some roses, can best be taken down and covered. Peat moss, straw or leaves may be used in such practices. Plants treated in such a manner over winter should not be tied upright immediately upon removing the mulch in the spring. Let them lie on the ground for ten days or two weeks for harden-ing off before this is done.

#### Perennials.

Perennials also will be benefited by winter mulch. The material used should be only that of a loose texture. Many times more damage is done by using mulches that mat down than would occur if no mulching were done at all. This is especially important with perennials like the foxglove, Canterbury bell and others having a rosette of succulent leaves which are easily rotted. Excelsior is excellent with these plants. As a general practice, excelsior, straw and peat moss are good mulches for perennials. Some types of leaves, such as those of the elm, may be used. In applying the mulch to perennials, it is best to work it well under the stems instead of piling it on the plant.

Bulbs may be mulched with leaves, peat moss or straw. Bulbs planted in heavy soils require the mulch as a protective measure against heaving. Where heavy mulches are applied, it is best that part of it be removed before the bulbs start growing in the spring. In planting croci late in the fall it is best to mulch immediately, maintaining an even and warmer temperature the soil, enabling the plants to develop a slight root growth.

#### TREES FOR EROSION CONTROL.

Approximately 600,000,000 trees and shrubs will be produced by nurseries of the soil-conservation service and cooperating agencies for use on erosioncontrol demonstration projects throughout the country the coming year, Charles R. Enlow, chief of the division of nurseries of the service, announced September 3.

The nursery program also calls for the collection of one million pounds of grass seed not commercially available, to be used in erosion-control planting.

To meet this heavy production assignment, nineteen new nurseries will be established, bringing the total number of service nurseries to eighty-three, in thirty-eight states. They now range in size from two acres to 800 acres, with the average about fifty acres.

Fifteen of these nurseries are under supervision of emergency conservation work and were established primarily to provide materials for use by the 545 ivilian conservation corps camps under direction of the service. Certain other nursery areas providing trees for the service are operated in cooperation with state foresters.

The mounting demand for trees, shrubs and grasses has been occasioned by the recent expansion in the demonstration program of the service, which increased the number of demonstration projects from forty-seven in thirty-one states, to 141 in forty-one states, and the number of C. C. C. camps from fifty-five to 545.

A large share of the 600,000,000 trees and shrubs will be used in the reforestation and afforestation phases of erosion-control work on farm and grazing lands. Under the soil-conservation program, areas too steep or otherwise unsuited for practical cultivation are taken out of crop production and planted in trees and shrubs to prevent erosion by wind and water. In many interest shrubs are used in trees about a proper or and in the stances about a proper or and in the stances about a proper or stances, shrubs and vines are used in

### the control of gullies. When planted

on gully banks, they auchor the soil and prevent it from washing away. When used on lands subject to wind erosion, trees and shrubs serve a double purpose by anchoring the soil and by breaking the sweep of wind. They also slow up run-off of rain water.

The one million pounds of grass seed will be used to plant cover on certain lands retired from cultivation under the erosion-control program. Like trees, grass anchors the soil and prevents it from being washed away by rain or blown away by wind. Grass seed will be collected from twenty-five species of native grasses not produced commercially.

In addition, the nurseries will cooperate with the bureau of plant industry in experimental and research work with grasses, collecting seeds of all types for testing and possible use in erosion-control work. Nine service nurseries are now growing a majority of the available native and foreign grasses for experimental purposes. Similar experimental work is being carried on in connection with trees. At the nursery at Tucson, Ariz., 190 different species of trees, shrubs and grasses are being grown for use on the erosioncontrol projects.

W. A. SHUNK, who was with the California Nursery Co., Niles, Cal., for many years, is now associated with the Armstrong Nurseries, Ontario, Cal.

### DREER'S

#### New Autumn Wholesale Price List

Just published. If you are not al-ready on our mailing list, write for a free copy today. More complete than ever. Bulbs, Seeds. Greenhouse Plants, Shrubs, Climbers, Ferns, Roses, Peren-nial Plants, Sundries, etc. Sent free.

HENRY A. DREER Philadelphia, Pa.

We offer First Quality tested seeds COLORADO EVERGREENS

and Native niels and

Gardens Colorado Springs Colorado

#### BOXWOOD

Buxus Suffruticosa 10 to 12 x 7 to 9 ins. 12 to 15 x 9 to 11 ins.

GOLDSBORO NURSERY Goldsboro, N. C.

#### PRIVET-

About 5,000 surplus 1-year-old, well rooted, stocky English Privet, Ligustrum vulgare, very hardy. Have been sheared ready for permanent planting.

\$2.00 per 100; \$18.00 per 1000, f.o.b. ere. Cash with order, please. Sample plant free

MILLER'S GARDENS, Grandview, Wash.

#### NUCROP SEED

French Crab Apple 80c lb.

French Pear \$1.25 lb.
(Special prices on quantities)

Order now for Fall delivery. Write for general Forest and Nursery Seed Catalogue.

WHOLESALE ONLY HERBST BROTHERS New York, N. V.

### TREE SEEDS WITH A REPUTATION FOR OVER 38 YEARS

Send for your copy of our New Price List of: Seeds of Conifers, Trees, Shrubs, Fruit, Palms, Sub-Tropical Plants, Lining-Out and Wood Grown Stock.

KATZENSTEIN & CO. ATLANTA, GA.

GRAPEVINES, SHADE TREES, SHRUBS, BLACKBERRIES, RED-LEAF BARBERRY WILLOWBEND NURSERY

PERRY, OHIO

N

oil

av.

nd

ble

Iso

in

ler

es.

it

or

ill

of er-

in-

eh of

ise

ty

ni.

ed

n

ny

### PLANT BARTELDES

Picea Pungens Glauca Colorado Blue Spruce

Hand picked from bluest trees

Also Evergreens and Deciduous Seeds from all sections of U.S. and Europe

Colorado-grown

Chinese Elm Seedlings Fall or Spring Delivery

Ask for Price List

The Barteldes Seed Co.

Denver, Colo.

We are collectors of

### ROCKY MOUNTAIN EVERGREEN TREE SEEDS

Including:

PICEA PUNGENS. Colorado Blue Spruce.
PICEA ENGELMANNII. Engelmann's Spruce.
PICEA DOUGLASII. Douglas Fir.
ABIES CONCOLOR. Colorado Silver Fir.
PINUS PONDEROSA. Yellow Pine.
JUNIPERUS SCOPULORUM, Silver Cedar.

Please tell us about your wants.
Our service will please you.

Our service will please you. Prices to the Trade are now ready.

#### THE COLORADO SEED CO.

1515 Champa St.

Denver, Colo.

### Milton Nursery Co.

Maple, in assortment for Parks, Cemeteries, Subdivisions and Landscape Work. Birch in variety, Hawthorn and other Ornamental and Shade Trees.

Seedlings, Fruit and Shade Trees, in assortment.

Ample and Complete Stocks.

Car lot shipments at reasonable freight rates.

Small Fruit Plants
Evergreens — Shrubs
Lining-out Stock
Send for Complete Trade List

SCARFF'S NURSERIES

#### American Bulb Company

Importers and Growers of
Dutch Bulbs, Cannas, Tuberoses, Gladioli, Hardy Lilles, Manetti, Lily of Valley,
Sphagnum Moss.
Send for Free Catalogue

31-37 W. 27th St. 1335 W. Randolph St. New York City Chicago, Ill.

#### NUT GROWERS MEET.

The Northern Nut Growers' Association, a national organization interested in the promotion and culture of nut-bearing plants and their products, at its annual meeting, at Rockport, Ind., last month, selected the New York state experiment station, at Geneva, as its meeting place in September, 1936. The extensive breeding work with filberts under way on the station grounds and the equally extensive variety testing with other nuts that the station specialists have carried forward for several years were instrumental in leading the nut growers to select Geneva for their 1936 convention.

Officers of the association for the coming year include Dr. G. A. Zimmerman, Harrisburg, Pa., president; J. F. Wilkinson, Rockport, Ind., vice-president; C. F. Walker, Cleveland, O., treasurer, and G. L. Slate, of the New York experiment station staff, secretary. Membership in the association is open to anyone interested in growing nut trees in the northern part of the

United States and Canada.

Outstanding work with filberts done at the New York experiment station includes an extensive variety test embracing many of the leading European sorts along with the best native strains obtainable, and an ambitious breeding program whereby it is hoped that hybrids between the European and native filberts may be obtained which will combine the size and quality of the former with the vigor and hardiness of the latter. Some of these hybrids are now beginning to fruit on the station grounds, and it is hoped that before long definite information may be avail-

standard varieties.

Based on his several years of work and observation with filberts, Professor Slate has prepared a bulletin on filbert growing in which he gives complete information on culture, choice of varieties, care of the plantation, harvesting and marketing the crop and other details. A copy of the bulletin may be obtained upon request to the station at

able on their merits as compared with

Geneva

#### ROCK GARDEN SOCIETY.

A meeting of the New England members of the American Rock Garden Society was held at Horticultural Hall, Boston, Mass., September 14, during the exhibition of the New England Dahlia Society. One or two of the members came a long distance, and several brought exhibits. Stephen F. Hamblin presided over the meeting.

presided over the meeting.

A nominating committee was appointed to select a regional vice-president, and there was a discussion on how best to increase membership and hold future meetings. The opinion was general that the society as a whole should not be tied up with any particular magazine, this acting as a handicap in securing new members. It was felt that as a society it should stand on its own feet and have an annual yearbook and eventually a magazine.

Some members favored the holding of an exhibition at the time of the Boston spring show, whereas others felt that such a show ought to be held in early June while flowers are blooming outdoors. It was pointed out, though, that everyone is extremely busy in June and attendance would be small.

### HOODACRES

### Originating Gardens

Our Large Double White DELPHINIUM

Varieties acclaimed the World Around

Also marvelous new colored kinds Both Plants and Seeds

#### JAPANESE IRIS

Extensive list of finest grown, including Hoodacres originations

To THE TRADE a special fall offer on Delphinium plants.

Ask for latest listing

CHAS. F. BARBER Troutdale, Oregon

#### HOODACRES

#### MAGNOLIA HYPOLEUCA

1 year from seed \$8.00 per 100

#### **BLEEDING HEART**

|   |    |   |        | Per 10 | Per 100 |
|---|----|---|--------|--------|---------|
| 2 | to | 4 | crowns | 81.50  | 812.50  |
| 4 | to | 6 | crowns | 2.00   | 17.50   |
| 6 | to | 8 | crowns | 3.00   | 27.50   |

DOTY & DOERNER, Inc.

Rt. 6, Box 92

Portland, Ore.

### A. McGILL & SON FAIRVIEW, OREGON

Wholesale Only

Our usual line of quality nursery stock, including Shade and Flowering Ornamental Trees and Specialties, Fruit Tree Seedlings and Roses.

Grown Right and Packed Right

A card will bring our list of items that will make you some money.

### Pink Flowering DOGWOOD

|      | -  | -    | -     | -    | -        | -    | -       |
|------|----|------|-------|------|----------|------|---------|
|      |    |      |       |      | Per      | 10   | Per 100 |
| 1.16 | to | 2 1  | t     | <br> |          | .00  | \$45,00 |
| 2    | to |      | t     |      |          | .50  | 70.00   |
| 3    | 03 | 4 1  | t     | <br> | <br>. 12 | .00  | 100.00  |
| 4    | 10 | 5 1  | t     | <br> | <br>. 19 | .00  | 165.00  |
| 5    | to | 6 1  | t     | <br> | <br>. 25 | .00  | 225.00  |
|      |    |      | clal- |      |          |      | 196     |
| 6    | to |      | t     |      |          | .00  | 400.00  |
| 6    | to | 8 1  | t     | <br> | <br>. 62 | .50  | 600.00  |
| 8    | to | 10 f | t     | <br> | <br>. 80 | .00  |         |
| 10   | to | 12 f | t     | <br> | <br>.115 | .00  | *****   |
| Can  |    |      | on    |      |          | Also | Lilacs. |
|      |    |      | -     |      |          | Cha  | Plants  |

Kingsville Nurseries H. J. Hohman - Kingsville, Md.

### **Newer Species of Sedum**

C. W. Wood Comments on Less Common Varieties of This Important Hardy Plant

The sophisticated gardener may profess to scorn sedums, but even he will be intrigued to the point of buying you show him something new good, and as long as new gardeners on the scene each year, there will be a demand for all the good landscape varieties. It is the purpose of these notes to point out the best sell-ers, as determined by a number of years' experience in handling this class of material, and, further, to try to clear up a little of the confusion in the nam-ing of sedums. First, however, I should like to mention one or two new species, which have recently come into the trade and whose valuable landscape qualities should gain them wide distribution.

#### Sedum Tartarinowii.

Sedum Tartarinowii was described by Maximowicz in 1883, but was not intro duced into cultivation until 1913, when F. N. Meyer, an employee of the United States government, collected the plant in Chihli province, China. Just why this material was sent to Kew Gardens, England, I do not know, but it appears that none of it reached the United States, and I find no mention of S. Tartarinowii in the American trade until 1933. It is now available from two or three American sources and should make rapid

headway with gardeners.
S. Tartarinowii belongs to the Telephium section of the genus, having the typical carrot-like root of that A superficial examination of the plant might lead to the conclusion that it is a small Sieboldii, and one would be not far wrong, for it is quite closely allied to that species. It can, however, be told from Sieboldii by the most careless, not alone by its smaller stature, but also by its toothed, narrow, lanceolate leaves and terminal heads of pale pink flowers on 3-inch stems in July and August. The plant is entirely distinct from any other sedum and is highly ornamental. It won the blue ribbon at the recent Cincinnati show of the Ameriean Rock Garden Society as the best single specimen of sedum.

#### Sedum Jaccardianum.

Sedum Jaccardianum, a newly discovered species, forming a link between sedum and sempervivum, has recently reached this country, but has not been tested long enough for one to form an estimate of its value for our climate. It can be said, though, that it makes an excellent and unique pot plant. It is probably not yet available to the trade and will be appraised later. Others are in the offing and will be reported on in these columns as rapidly as their value and adaptability to our climate are ascer-tained. It is hoped that the following observations on the ones generally available in the trade will be a help:

#### Sedum Acre.

Although S. acre has its good points as a garden plant, its self-sowing habit creates a problem for the gardener in which the careful nurseryman does not care to be involved. Notwithstanding that fact, there is a form of the species,

known as S. acre minus (not S. acre minor, for it is scarcely distinguishable from the type), whose merits as a wall plant overcome its few faults. The foliage mass, which is typically acre but on a smaller scale and of a deeper tone of green, is not over an inch high, and on this sit the small acre flowers. There is a widespread prejudice among gardeners against anything with S. acre attached to it; consequently, this is not an easy plant to sell by mail. But where gardeners can see the plant growing, it sells itself. It should, therefore, be a good item for the neighborhood grower.

#### Confusion in Naming.

The tall, variegated plant generally known as S. spectabile variegatum, but which is correctly S. alboroseum follis medio-variegatis, is a good ornament and is usually much in demand. As has been pointed out before, it shows to best advantage when grown in part shade. It should be mentioned, too, that stems with green leaves should be removed as they show up. There is no variegated form of S. spectabile so far as I know.

Much weedy material which should be kept at home is being disseminated as S. album. The plant is highly variable and has produced a number of forms with distinct garden value. S. album murale and S. album micranthum chloroticum deserve special mention. first of these has year-around purple leaves and stems and pinkish flowers, while the other is a permanent yellowish green. The latter is often known in the trade as S. balticum.

#### IF YOU SOW SEED -

You need our catalogue for reference and purchases. Buy your seed from an experienced perennial grower.

Here are just a few of fresh crop eeds now ready for immediate sowing: Delphinium. Most of the better strains. Aquilegia. The finest long-spurred hy-

Trollius. Six varieties—seed just gath-

Anemone Palsatilia. Sown now will germinate quickly.

Dicentra Eximia. Plumy Bleeding

Dictamnus. Both pink and white becoming popular.

#### THE JOSEPH F. MARTIN CO. Painesville, Ohio

### PACHYSANDRA TERMINALIS

Heavy 1-year field-grown... \$3.50 \$25.00 Heavy 2-year field-grown... 4.50 35.00 Strong 24-in. potted plants. 6.50 55.00

HUGH B. BARCLAY, Narberth, Pa.

"SOMETHING Dianthus Rose-Cushion

Foliage: Evergreen; very dwarf and compact; glaucous in color; height 2 inches.
Fiswers: Rose color; on 2-inch stems; completely covering plant the last of May.
Field grown clumps, per hundred \$10.00

The Arthur L. Watson Nurseries
Grand Rapids, Mich.

#### The confusion in the altissimum-anopetalum-reflexum section is probably beyond all hope of disentanglement so far as garden material is concerned. Space will not be taken at this time to do more than point out a few good plants that belong in this group and try to make their characteristics fit the correct name. The most attention-arresting form of altissimum that I have seen is the one known to gardeners as S. nicæense, but is probably correctly S. altissimum var. latifolium. It is no more than a large-leaved, vigorous form of altissimum, with the character-istic flattened leaf, lanceolate in outline, inflorescence erect in bud (the latter

characteristic is an unfailing distinguishing mark between altissimum and anopetalum on the one hand, and reflexum and rupestre on the other, the latter always having the flower buds drooping),

and greenish white flowers.

There is an ornamental sedum in commerce known as Sedum elegans, but of which the real identity is not clear, some holding that it is an altissimum and others that it is a form of anopetalum. All material under this name that I have seen has the long lanceolate sepals with concave outer surfaces when in fruit, which are distinguishing marks of anopetalum. I, therefore, refer it to ano-petalum and it thereby becomes S. ano-petalum var. elegans. Be that as it may, the plant is one of the best selling items have and will undoubtedly be the same for the neighborhood growers. In addition to the foregoing, the plant generally known as S. Forsterianum or S. pruinatum Forsterianum, but which is no more than a form of S. rupestre, is an attractive plant.

#### Sedum Divergens.

Not many western American sedums of any great value thrive in our eastern climate, but S. divergens is a plant of out-standing beauty which will do anything we ask of it. It is much confused in

#### SPECIALS FOR FALL

Hardy Ferns: Ostrich, Lady, Hav-scented O'ch, Lady, 3.00 Send for complete list of Wild Rock Garden Plants, Perennials, E greens and Hardy Ferns. North grown plants are better. and

FERNDALE NURSERY Hans Mosback, Prop. ASKOV, MINN.

#### TREE PEONIES

Herbaceous Peonies, Malus, Lilacs Ask for list of our specialties.

THE COTTAGE GARDENS Lansing, Mich.

#### PROFITABLE PEONIES

Best Varieties. Attractive Prices. Fine quality roots, liberally graded. 24th Annual Catalogue ready

HARMEL PEONY COMPANY Growers of Fine Peonies since 1911. Berlin, Maryland. IAN

n-ano-

ly be-far as

e will

than pelong charimum

o gary corrorous acteritline,

latter

guishanoano-lexum

latter

ping),

ut of some

1 oth-

have

with fruit,

ano-

ano-

anomay,

items the In

gen-

or S. is no

ms of

n eli-

thing

ed in

100

.00

.00

.00

IN.

S

ı. All Automotive Tree **Moving Machines** 

If you are not using our new Tree Mover, it is costing too much to move your trees. Write for description.

#### **DANBURY & EAGLESON**

Manufacturers of Automotive Tree-moving Machines, Carts and Wheelbarrows 72nd & Mission Rd., Kansas City, Kan.

### Baled SHINGLE TOW

for nursery shipments.

Made of Poplar, Ash, Elm, etc. Holds moisture exceedingly well. Write for prices.

J. M. THOMPSON

### PROTECT

TREES - SHRUBS against Rabbits

with COPPER SOAP RODENT REPELLENT.

Easily applied—economical—effective.
One Application Lasts All Year. Quarts. \$1.00 postpaid—protects 100 trees. Special offer to Nurserymen.

Write for detailed literature. Castle Chemical Co. Castle Rock, Minn.

#### PRINTS, MAPS and FOLIOS PLATE BOOKS

Process Color Printing Co. 701 Searle Bldg., Rochester, N. Y.

#### PLATE BOOKS

Business is coming back!
You will need compact folders, plate books, etc., to help in your selling campaign. Start using our colored photographs. Write for information.

B. F. CONIGISKY
Nurserymen's Service 211 Hamilton St.

#### QUALITY WOOD LABELS

3½x% inches, copper wired, per 1000, \$1.75 plain, \$2.25 painted. Your name and address printed, 55c

P. Heinze & Co. 3446 N. Oakley Ave.,

Chicago, Ill.

nurseries with a more tender species, S. oreganum. The two plants may be distinguished by the following characteris-S. divergens has opposite leaves, while S. oreganum may have opposite or alternate leaves, though they are usually alternate. The extra-long, acute, sub-erect petals of S. oreganum differentiate it from all other native, spatulate-leaved, yellow-flowered species. It is the bril-liant foliage colors, the result of expo-sure to sun and dry soil, which make S. divergens so attractive to gardeners, a factor which should be kept in mind when placing the plant in your show

For brilliant fall foliage colors, S. Ellacombianum is the best of the Aizoon section and is, therefore, of much landscape value. At other times of the year, it is scarcely distinguishable from S. kamtschaticum to the unobserving eye. It may be told from the latter, however, by its nonbranching stems, light green leaves instead of the dark green leaves of S. kamtschaticum, absence of any red in fruit or flower and in a number of other ways.

S. Ewersii, because of its pleasing glaucous foliage and showy purplish flowers, has always appealed to gardenflowers, has always appealed to gardeners, but its two small forms, variety homophyllum, with stems two to three inches long, and variety Hayesii, a minute plant scarcely an inch high, are of more appeal to the rock gardener. Both varieties mentioned are typically Ewersii except in airo. except in size.

The only form of hispanieum that is at all permanent is the one known generally as S. glaucum, S. lydium glaucum, S. Whitmanii and S. silver, but which is correctly named S. hispanicum minus. It is a true perennial, making a close mat of blue foliage an inch thick and productions. ing pink flowers on 2-inch stems. It is one of the loveliest of the tiny sedums and a good seller for the neighborhood nurseryman.

#### Sedum Hybridum.

Although S. hybridum has been known for centuries, having been technically described by Linnæus in 1753, it is still rather uncommon in American gardens. This is not as it should be, however, for the plant is one of the most ornamental of the Aizoon section. Unlike most of that group, it is evergreen, with creeping branches clothed with alternate leaves, generally spatulate, which assume bril-liant winter colors. S. hybridum generlant winter colors. S. hybridum generally has two flowering periods, one in late spring and the other in late summer, when there appear bright yellow flowers in umbellate cymes. Unfortunately, it is often misnamed in gardens, appearing under such names as S. Mid-dendorffianum, S. kamtschaticum, S. flo-riferum, etc., but it may be told from all these by its creeping habit and from all but S. floriferum by its linear sepals.

A further discussion of good landscape sedums will be published in the next issue.

#### DUIS IN AUTO ACCIDENT.

J. G. Duis, proprietor of the Duis Nut Nursery, Shattuc, Ill., prepared a paper on "New Kaskaskia River Pecans and Hicans" for the meeting of the Northern Nut Growers' Association last month. It was read in his absence, because in a rainstorm on his way to the meeting his automobile was hit squarely in the back by a school bus, and he was a week recovering from injuries.

#### **CHOICE PEONIES**

| Strong 3 to a-eye o   | 1111810 | ing.   |         |
|---|---------|--------|---------|
| Rating  | Each    | 10     | 100     |
| 8.7 Albatre, milk-white   | 80.20   | \$1.50 | \$10.00 |
| 8.6 Albert Crousse, seashell-   | *****   |        |         |
| pink  | .20     | 1.50   | 12.00   |
|   |         | 2.00   | 15.00   |
| 8.8 Alsace-Lorraine, white.   |         | 1.50   | 12.00   |
| 7.8 Augustin d'Hour, red  | .20     |        |         |
| 8.7 Bayadere, creamy white  | .30     | 2.50   | 20.00   |
| <ol> <li>Bayadere, creamy white</li> <li>Boule de Neige, white</li> </ol> | .15     | 1.20   | 8.00    |
| 8.1 Couronne d'Or, white  | .20     | 1.50   | 10,00   |
| 7.6 Edulis Superba, pink  | .15     | 1.20   | 8.00    |
| 8.1 Emile Hoste, creamy   |         |        |         |
| white   | .25     | 2.00   | 15.00   |
| 8.6 Eugenie Verdier, tall<br>pink   |         |        |         |
| pink  | .20     | 1.50   | 10.00   |
| 8.4 Felix Crousse, red  | .20     | 1.50   | 12.00   |
| 9.3 Festiva Maxima, white   | .20     | 1.50   | 10.00   |
| 8.9 Georgiana Shaylor, pink   | .25     | 2.00   | 15.00   |
| 8.5 Germaine Bigot, lilac   |         |        |         |
| rose  |         | 1.20   | 8.00    |
| 8.2 Gismonda, late pink   |         | 1.50   | 12.00   |
| 8.2 Grover Cleveland, dark  |         | 4.00   | 20.00   |
|   | .20     | 1.50   | 12.00   |
| 8.8 Karl Rosefield, best red  |         | 1.50   | 12.00   |
|   |         | 2.50   | 20.00   |
| 9.0 La France, beautiful pink   |         | 1.50   | 10.00   |
| 8.1 La Tendresse, milk-white  |         |        |         |
| 7.5 La Tulipe, lilac white  |         | 1.50   | 10.00   |
| 8.1 Livingstone, soft pink  |         | 1.50   | 12.00   |
| 7.6 Lord Kitchener, early red   | .25     | 2.00   | 15.00   |
| 8.5 Mme. Emile Galle, pink  | .20     | 1.50   | 10,00   |
| 9.4 Mme. Jules Dessert, blush   |         |        |         |
| white   | .40     | 3.50   | 30.00   |
| 8.4 Marguerite Gerard, pink   | .15     | 1.20   | 8.00    |
| 8.3 Marie Jacquin, glossy   |         |        |         |
| white   |         | 1.50   | 10.00   |
| Officinalis Rubro-plena.  |         |        |         |
| red   | .35     | 3.00   | 25.00   |
| Officinalis Tenuifolia,   |         |        |         |
| double red  | 1.00    | 9.00   | 80.00   |
| 7.6 Pierre Dessert, crimson   | .20     | 1.50   | 12.00   |
| 8.2 Pierre Duchartre, pink  | .20     | 1.50   | 10.00   |
| 8.6 Primevere, sulphur-yel-   |         | ****   |         |
| low   | .35     | 3.00   | 25,00   |
| 8.7 Reine Hortense, large   | .00     | 0.00   | 1001010 |
|   | .20     | 1.50   | 12,00   |
| 7.2 Rubra Superba, deep red   | .25     | 2.00   | 15.00   |
|   | 1.00    | 4.00   | 10.00   |
|   |         | 2.00   | 15.00   |
| rose  |         | 3.00   | 25.00   |
| 9.7 Solange, waxy white   | .33     | 3.00   | 40.00   |
| 9.7 Tourangelle, pearly   | 40      | 0 80   | 30,00   |
| 9.3 Walter Faxon, rose-pink   | .40     | 3.50   |         |
| 9.3 Walter Faxon, rose-pink   | .60     | 5.50   | 50.00   |
| White Mixed, per 1000,  |         |        |         |
| \$50.00   | ***     | 1.00   | 7.00    |
| Pink Mixed, per 1000,   |         |        |         |
| \$50.00   |         | 1.00   | 7.00    |
| Red Mixed, per 1000,  |         |        |         |
| \$60.00   |         | 1.00   | 8.00    |
| For selected 5 to 6 eye root  |         |        | r cent  |

For selected 5 to 8-eye roots, add 50 per cent. F.O.B. Henton Harbor, Michigan. 3 per cent discount for cash with order. 5 of a kind at 10 rate: 25 or over at the 100 rate: 250 at 1000 rate.

Our wholesale catalogue lists many other varieties; also a choice assortment of Tulips. Narcissi. Irises. Muscari, Lilies, Phlox and nany other items.

#### A. M. Grootendorst Benton Harbor, Mich.

### Closing Out

PEONY SALE
To clear our land, 25% cash discount.
EARLY-FLOWERING OFFICINALIS.
Plant them now.
Strong 3 to 5 eyes.
Mutabilis, flesh, changing to white, \$30,00
Roseo-plena, double bright pink. 30,00
Roseo-plena, double bright pink. 30,00
Roseo-plena, bright scarlet. 25,00
These varieties are valuable for early

These varieties are valuable for early cutting. Ask for our prices on other Peonies. We grow the healthiest Peonies in Michigan. Buy Weller's perennials now for cut flowers. Send for our list.

WELLER NURSERIES CO. Holland, Mich.

Perennials for Immediate Delivery

Perennials for immediate Delivery
Strong field-grown plants. Per 10 Per 104
Alyssum Sax. Compactum, yellow. \$1.09 & 66.00
Anchusa Myosotidiffors, blue. 1.50 10.00
Anchusa Myosotidiffors, blue. 1.50 10.00
Anchusa Pill. Liderina, lavender 1.50 10.00
Armerin Laucheana, ed. 1.20 \$.00
Asphodelus Luteus, yellow. 1.20 \$.00
Delphinium Belladonna, Improved 1.00
Delphinium Belladonna, Imp

PITZONKA'S PANSY FARM, BRISTOL, PA.

### **Rose Society Meeting**

Annual Meeting, Trade Show and Inspection of Rose Gardens Draw Many to Rochester, N. Y.

The thirty-seventh annual meeting of the American Rose Society was held at the Hotel Seneca, Rochester, N. Y., September 9 to 11. The members were the guests of the Rochester Rose Society and, between meetings and afterward, were taken to points of interest within fifty miles of Rochester and otherwise

generally entertained.

Several members acted as judges at the Rochester rose show, which was held in Convention hall. This show, which was opened by Mayor Stanton of Rochester, was a splendid exhibition for this time of the year. Several of the English-type exhibition boxes were used, showing half a dozen perfect flowers in each. There were magnificent exhibits of Carillon, Eclipse and Rochester roses, three of the new varieties of J. H. Nicolas, of the Jackson & Perkins Co., Newark, N. Y. After the opening of the show, the judges were taken back to the hotel, where they were the guests of the Rochester Rose Society at luncheon.

#### Trustees Meet First.

At 3 p. m. Monday, September 9, the trustees' meeting was held, ten of the seventeen trustees being present. One of the most important matters considered was that regarding the awarding of prizes for novelty roses. There are so many complications in the present set of rules and scale of points that, after a vote to award the prizes in the future only to novelties which can be scored in the official test gardens at Elizabeth park, Hartford, Conn., and the international rose test gardens, Portland, Ore., it was decided a revision of the whole matter is necessary,

and the president was authorized to appoint a committee to revise the rules and scoring scale and to report to the trustees before roses bloom next spring.

A little more latitude was given to the undisseminated novelties. In the future, they will be entitled to awards during the first year of their introduction. Another suggestion which will possibly be adopted when the new rules committee makes its report is that a novelty rose will not be entitled to the gold medal certificate until it has won a certificate of merit. Consequently, the rose will have to be judged two years in succession. It is hoped that this will help to stop unworthy varieties from receiving the high awards.

#### Eminent Rosarians Honored.

Peter Lambert, of Germany, who originated the two great white roses, Frau Karl Druschki and Kaiserin Auguste Viktoria, was made an honorary life member of the society.

The John Cook medal, which is one of the highest awards given a rose in this country and which is awarded every three years, once for a garden rose and the next time for a greenhouse variety, was awarded to L. B. Coddington, Murray Hill, N. J., for his popular President Herbert Hoover.

In 1834, Samuel Feast, Baltimore, Md., was awarded a medal by the Maryland Horticultural Society for his work in originating the setigera hybrids, which were popular climbers of that time. Baltimore Belle, which is still in commerce, is one of these Feast roses. Mr. Feast's descendants have had a replica of this medal made, and it was awarded at this meeting to M. H. Hor-

vath, Mentor, O., who originated the first Wichuraiana hybrid climbing roses and is now working with Rosa setigera. His first hybrid of this prairie rose was Dubloons, which made its appearance in establishment his wear.

in catalogues this year.

The Bloomfield medal, given by the late Captain Thomas to the originator of a superior hardy everblooming rose, was awarded to Somerset Rose Nursery, Inc., New Brunswick, N. J., for New Dawn, introduced by Henry A. Dreer, Inc., Philadelphia.

The gold medal certificate of the American Rose Society was awarded to J. H. Nicolas for his hybrid tea polyantha rose, Rochester.

#### At Des Moines and Tyler Next Year.

Des Moines, Ia., was chosen as the place for the semiannual meeting in June, 1936, and Tyler, Tex., for the annual meeting next fall.

The secretary's and treasurer's reports showed a healthy and steady increase in both membership and the bank account.

Tuesday, September 10, was devoted to the annual business meeting and lectures. In the morning, G. F. Middleton, Seattle, Wash., made an interesting address on the exhibiting and judging of the exhibition-type rose as they are done in the Pacific northwest.

P. G. Enser, Buffalo, told how roses are grown for exhibition in the east. In the afternoon, the last word on rose diseases was presented by Prof. L. M. Massey, of Cornell University, Ithaca, N. Y.

Tuesday evening was devoted to the annual banquet, short speeches being made by Superintendent Slavin of the Rochester parks, Roland G. Gamwell, Bellingham, Wash., and Dr. J. A. Gamble, Washington, D. C., who told of a recent visit to rosariums of Europe. A beautifully illustrated lecture on "The Newer Roses," by Dr. J. Horace McFarland, Harrisburg, Pa., was the feature of the evening. All of the meet-

# ONLY TWO WEEKS LEFT To Get Bailey's Cyclopedia at Half Price!

Bailey's Standard Cyclopedia of Horticulture is a fountain of knowledge wanted by everyone interested in horticulture. Originally it cost \$40. Lately it has been \$25. Now it will be published for \$15 per set. If you order before the publication date, you can get it at the special price of \$12.50.



Publication of the new set will be made October 22. After that date the price will be \$15. By placing your order now, in advance of publication, you can get this great work for the lowest price ever offered, \$12.50. If you send the cash with the order now, the set will be shipped carriage charges prepaid.

The Cyclopedia will be in three volumes and similar to the \$25 set page for page, containing absolutely all of the material, all of the illustrations and even all the color plates. The set has a total of 3,639 pages, with 4,176 illustrations.

Mail your order now to AMERICAN NURSERYMAN, 508 S. Dearborn St., Chicago

IAN l the

roses

gera. Ray 6

rance

7 the

nator

rose,

sery,

New

reer,

the ed to poly-

ear.

the

g in

in-

the

oted

lecddle-

rest-

udg-

they

0868

east. rose

. M.

aca,

eing

the

vell,

am

of a A

Mc-

fea-

eet-

### llex, Camellias, Azaleas, Nandinas

OTHER NURSERY STOCK

- Write for -Wholesale Catalogue

### Fruitland Nurseries

Augusta, Ga.

#### TAXUS CUSPIDATA CAPITATA THE ONLY HARDY UPRIGHT YEW Should supersede Arbor-vitæ for hedge purposes

AZALEAS (Evergreen and Deciduous)

MAGNOLIAS Large Flowering

RHODODENDRON HYBRIDS and other scarce items.

Send us your list of requirements with full particulars as to quantities, varieties and sizes.

**BOBBINK & ATKINS** Rutherford, N. J.

#### C. R. BURR & CO., INC.

MANCHESTER, CONN.

HEAVY SURPLUS ON SOME ITEMS Write for Low Prices

**Princeton Nurseries** of PRINCETON, N. J. **SUPERIOR Hardy Ornamentals** 



#### **EVERGREENS**

For Seventy years growers of Quality Evergreens Lining Out Stock a Specialty Trade List Now Ready

EVERGREEN NURSERY CO.

#### HILL'S EVERGREENS

Complete assortment of lining out sizes.

Also larger grades for landscaping.

Send for our wholesale catalogue.

D. HILL NURSERY CO.

EVERGREEN SPECIALISTS

Largest Growers in America
ex 402

DUNDEE, ILLINOIS

### Canterbury Boxluood

Buxus suffruticosa and B. sempervirens. Selected uniform plants; bushy and foliaged to center; masses of fibrous roots. Finished specimens from 4 inches up, ready for quick shipment. Prices lower, plants larger. Ask for special list. CANTERBURY NURSERIES, Inc., Box A, Easton, Md.

ings were presided over by the president, Leonard Barron, Garden City, N. Y.

#### Visit Test Gardens at Newark.

Wednesday, September 11, the mem-bers were the guests of the Rochester Rose Society and were taken to the nurseries of the Jackson & Perkins Co., Newark, N. Y., where several hours were spent in the test gardens viewing the newer roses. Later a delightful luncheon was served.

On the way back to the hotel, visits were made to the great rose-growing establishment of George B. Hart, Inc., and the seed and plant testing gardens of Hart & Vick, Inc. The fine rose garden of W. O. Ingle, president of the Rochester Rose Society, was visited, as was that of Mrs. George C. Schlegel, where tea was served.

Most of the members started home after this visit, although a few stayed overnight and went to Niagara Falls the next morning.

The officers elected for 1936 were: President, Leonard Barron, Garden City, N. Y.; vice-president, Dr. T. Allen Kirk, Roanoke, Va.; secretary, R. Marion Hatton, Harrisburg, Pa.; treasurer, S. S. Pennock, Philadelphia, and trustees, James C. Clark, Riverton, N. J.; A. F. Watkins, Tyler, Tex.; N. J.; A. F. Watkins, Tyler, Tex.; David Robinson, Portland, Ore, and Mrs. W. W. Gibbs, Stanton, Va. R. Marion Hatton, Sec'y.

#### FALL SHOW AT ROCHESTER.

#### During Rose Society's Meeting.

Rochester, N. Y., was the center of interest for rose enthusiasts September 10 and 11, when the Rochester Rose Society staged a fall flower show in connection with the first fall convention of the American Rose Society. About 300 visitors from out-of-town were attracted to these events.

Among the early arrivals were Leonard Barron, New York, president of the American Rose Society; Richardson Wright, editor of House and Garden; Wright, editor of House and Garden; R. Marion Hatton, West Grove, Pa., secretary of the society, and G. F. Middleton, Seattle, Wash., noted as a keen judge of roses. These men, along with W. O. Ingle, president of the Rochester Rose Society, were guests of the Jackson & Perkins Co. and Dr. J. H. Nicolar noted rose bybridizer in an innecess. olas, noted rose hybridizer, in an inspection tour to the establishment of the Western N. Y. Rose Co., Rochester. The flower show was considered a

success despite a poor growing season. Convention hall was used. In the center were the displays of the garden clubs and of the local retail florists. Around the walls were the exhibits made by the parks and commercial firms.

Joseph Schum had a good display of gladioli, dahlias, montbretias, sea lavender and liatris. Harry Watson, West Webster, displayed miniature gardens and southern novelties.

Evert J. DeNeve, of Willow park, West Webster, staged a display, which an archery target and a shuffle-board were notes of color. Highland park filled a corner with palms, ferns, crotons and begonias.

The Brown Bros. Co. display was a small formal garden with a central walk from which ran sunken gardens filled with roses on either side.

The county parks system exhibit was

20,000 CHERRY, Montmorency and Early Richmond, 2-year, XX and †4 inch. 5,000 SPIRÆA, Vanhouttel, 3 to 4 feet and 4 to 5 feet. 25,000 ELMS, American, Vase and Me-line, transplanted, up to 4 inches.

ine, transplanted, up to 4 inches.

10,000 MAPLE, Norway, transplanted, up to 2½ inches.

5,000 ARBOR-VITÆ, Pyramidalis, up to 8 feet.

400 PINE, Mugho, from 2 to 4 feet.

400 PINE, Mugno, from 2 to 4 rest.
1,000 SPRUCE, Norway, sheared, none
better. 3 to 5 feet.
600 JUNIPER, Pfluer's, 5 to 8 feet
spread, beauties.
2,000 ARBOR-VITÆ, American, and
RETINOSPORAS, 4 to 7 feet. Send for list on many other items.

#### C. M. HOBBS & SONS, Inc. Bridgeport, Indiana

Largest Nursery in Indiana.

Established 1875.



#### PEACH PITS

**OUR PITS COMPARE FAVORABLY** WITH THE BEST

#### HOGANSVILLE NURSERIES

Hogansville, Georgia

#### OREGON-GROWN ROSEBUSHES

Send for List PETERSON & DERING, Inc. Wholesale Rose Growers SCAPPOOSE, OREGON

#### PRIVET and BERBERIS Splendid Stock

Write for Special Quotations LESTER C. LOVETT

Delaware

#### RASPBERRIES CHINESE ELM

ANDREWS NURSERY

Faribault, Minn.

#### RHODODENDRONS-

KALMIAS and AZALEAS
Fine nursery-grown and collected plants.
Various sizes in any quantity.

LINVILLE NURSERIES

Elevation 4,000 feet
NORTH CAROLINA LINVILLE

Address: L. A. and P. J. A. BERCKMANS
Catalogue upon request Augusta, Georgia

banked with evergreens. Material for banked with evergreens. Material for the display was taken from four parks of the city. F. W. Stothard had an exquisite display of dahlias. The Cleve-land Cut Flower Co., Cleveland, O., was represented with a good-size showing of the new patented rose, Radiant Beauty. A massed garden display filled the entire corner of the hall in which Hart & Vick, Inc., outdid itself.

Jackson & Perkins Co., Newark, N. Y. showed between sixty and seventy varieties of outdoor roses. Among the newer varieties were Rochester, a large-flow-ering hybrid of the polyanthus, Signora; Alice Harding, a new yellow; McGredy's Yellow; Gloaming; Samuel McGredy, Mme. Jean Gaujard, the new orange French rose; Jean Cote, and McGredy's Triumph.

William Lauweret, landscape contractor, showed in his collection several novelties, including English holly, Hip-pophaë rhamnoides, Calluna Alportii and alba, bayberry and Prunus spinosa.

#### OLD ILLINOIS NURSERY SOLD.

Hinsdale Nurseries, Inc., has pur-chased the Littleford Nurseries Co., Hinsdale, Ill. The latter firm was established in 1850 and operated as the Littleford Landscape Nurseries. Richard Theidel is president and Hans Rausch is secretary of the new corporation, which will carry on the nursery and landscape business.

F. J. Littleford will devote his time to his other interests, principally the growing of peonies for the cut flower

#### BETTER IN WISCONSIN.

Business has improved materially in Wisconsin this year over 1934, states W. G. McKay, president of the McKay Nursery Co., Madison, Wis. There is a decided improvement of feeling among farmers, and the demand for fruit trees and small fruits has consequently in-creased. It appears that ornamental shrubs will be cleaned up satisfactorily before spring.

#### CLASSIFIED ADVERTISING

Moline Elms, Linden, Sugar Maple.
Elmgrove Nursery. Leetsville. Mich.
New Hardy Plants. Get ahead of the leaders by sending for our list of novelties.
Gladwood Gardens. Box A. Copemish. Mich. Roses, field-grown. 2-year, No. 1; Peaches year; Cherries, 2-year; Pears, 2-year. Ex a nice, first-class stock; send for list. J. Geraghty & Son, Geneva, N. Y.

J. Geraghty & Son, Geneva, N. Y.

Roses
2-year old, budded, field-grown, choice rosebushes,
Send for catalogue and prices.
Stabler's Rose Garden, Gresham, Ore.

Tree Peony, Banksil, large, double, flesh
pink, robust, free-blooming variety. Strong
shrubs, own roots, each, \$3.00. Herbaceous
Peonles, best varieties.
Oberlin Peony Gardens, Sinking Spring, Pa.

Austrian Pine 3.10.4 ft. and 2.50.3 ft. Have

Oherlin Peony Gardens, Sinking Spring, Pa.
Austrian Fine, 3 to 4 ft. and 2 to 3 ft. Have surplus of 800. Trees are healthy, well developed and have been three times transplanted. Make an offer.

Garfield Everereen Nursery. Bedford. Ohio.

Phlos subulata, 4 newer and distinct varieties. Atropurpurea, Brittonii. G. F. Wilson, Moerheimii, strong field clumps, \$1.00 per 10, \$8.00 per 100, \$50.00 per 1000. Divisions for lining out or potting up, \$2.00 per 100, \$15.00 per 1000.

Our new catalogue, listing over 500 varieties of choice Hardy Plants, mailed free upon request.

request.

D. & C. Hardy Plant Nursery. Westminster, Md.

Nursery Tools, Leonard Full-strapped
Spades. Kunde Knives and Shears. Budding
and Grafting Supplies. Free 80-page wholesale catalogue illustrates 600 tools.

A. M. Leonard & Son, Piqua, Ohio.

#### ROSE REGISTRATIONS.

The following roses were registered with the American Rose Society on September 25, 1935. If no objections raised within six weeks after the date of this notice, the registration of these names will become permanent:

Julia Ann Bostick. Polyantha. Originated by J. A. Bostick. Tyler. Tex. A sport of Ideal. The flower is described as apple blossom pink, with a white base to the petals, the base forming a snow-white circle. The flower is small and cupped and blooms in clusters on short, strong stems. It has a splendid fragrance. Plants are from twelve to sixteen inches high. It is an abundant bloomer throughout the senson.

Radio. Hybrid tea. Originated by Pedro Dot, San Feliu de Llobregat, Snain. To be introduced by the Conard-lyle Co., West Grove, Pa. It is a sport of Condesa de Sastago. Flowers are yellow, slightly finted pink, with rose striver ser yellow, slightly finted pink, with rose striver ser yellow, slightly finted pink, with rose striver are large, cupped and borne several together on medium-strong stems. They have a strong, spley fragrance. Plants are vigorous, with abundant, wrinkled, light green foliage. It is a profuse, continuous bloomer throughout the season.

Snowbird. Hybrid tea. Originated by R. Marion Hatton, Harrisburg, Pa. To be introduced by the Conard-lyle Co., West Grove, Pa. It is a cross of Chastily X Louise Crette. Flower is of the type of White Ensign, of medium size, with a high center. It is borne several together on a medium stem. It is double with a thing treatment of the produced by the Conard-lyle Co., West Grove, Pa. Rockefort. Hybrid tea. Originated by Charles Mallerin, Varces, France. To be introduced by the Conard-lyle Co., West Grove, Pa. A seedling of Mrs. Pierre S, duPont X Charles P, Kilham. Flowers are of the type of Golden Dawn, of large size, of full form, are double and are borne singly on medium stems. Fragrance is described as strong, of a spicy fruit character. The color of the flower is orange old rose. Growth is given as twenty-four inches, of open habit.

Mme. Pierre Kochlin. Hybrid tea. Originated by University of the flower of the spirity of the produced by the Conard-Pyle Co., West Grove, Pa. This is a cross of Mme. Galiand X Cecle Waiter. Frow in the develop into doubl

R. Marion Hatton, Sec'v.

#### HELP WANTED

Young nursery salesman with pleasing personality and some landscaping experience, by established firm in Colorado. Commission, 30%.

Address No. 26, American Nursery-man, 508 S. Dearborn St., Chicago, Ill.

#### INDEX TO ADVERTISERS

| American Buib Co. Andrews Nursery Co. Barber, Charles F. Barclay, Hugh B. Barteldes Seed Co. Bobbink & Atkins. Burr & Co., C. R. Campbell-Hausfeld Co. Canterbury Nurseries Carpenter & Co., Geo. B. Castle Chemical Co. Chase Bag Co. Chase Bag Co. Chase Gardens D. & C. Hardy Plant Nursery Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrave Nursery Evergreen Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Katzenstein & Co. Katzenstein & Co. Mingsville Nurseries Leonard & Son, A. M. Linville Nurseries Lowett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Watson Nurseries, Arthur L. Wellen Nurseries Willowbend Nursery Wisconsin Moos Co. Wolf Rros.   | American Buib Co.           |     |
|--|-----------------------------|-----|
| Barber, Charles F. Barclay, Hugh B. Barteldes Seed Co. Bobbink & Atkins. Burr & Co., C. R. Campbell-Hausfeld Co. Canterbury Nurseries Carpenter & Co., Geo. B. Castle Chemical Co. Chase Bag Co. Chase Co., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrave Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storns Watson Nurseries Watson Nurseries, Arthur L. Wellen Nurseries Willowbend Nursery Wisconsin Moss Co. | Andrews Nursery Co          | 17  |
| Barclay, Hugh B. Barteldes Seed Co. Bobbink & Atkins. Burr & Co., C. R. Campbell-Hausfeld Co. Canterbury Nurseries Carpenter & Co., Geo. B. Castle Chemical Co. Chase Bag Co. Chase Bag Co. Chase Bag Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrave Nursery Evergreen Nursery Evergreen Nursery Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonerd & Son, A. M. Linville Nurseries Lowith, Inc., Julius. Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Stors & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Vallowben Nursery Wisconsin Moss Co.  | Barber, Charles F.          | 13  |
| Barteldes Seed Co. Bobbink & Atkins. Burr & Co., C. R. Campbell-Hausfeld Co. Canterbury Nurseries Carpenter & Co., Geo. B. Castle Chemical Co. Chase Bag Co. Chase Bag Co. Chase Go., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Evergreen Nursery Fruitland Nurseries Garfield Evergreen Nursery. Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Stors & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Vallowbend Nurseries Stabler's Rose Garden Stors & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Barclay Hugh R              | 14  |
| Bobbink & Atkins Burr & Co., C. R. Campbell-Hausfeld Co. Canterbury Nurseries Carpenter & Co., Geo. B. Castle Chemical Co. Chase Bag Co. Chase Co., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseries Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Watson Nurseries, Arthur L. Wellen Nurseries Willowbend Nursery Wisconsin Moss Co.  | Bartaldas Sand Co           | 12  |
| Burr & Co., C. R. Campbell-Hausfeld Co. Canterbury Nurseries Carpenter & Co., Geo. B. Castle Chemical Co. Chase Bag Co. Chase Co., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrove Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseries Howard-Hickory Co., Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Darreides Seed Co.          |     |
| Campbell-Hausfeld Co. Canterbury Nurseries Carpenter & Co., Geo. B. Castle Chemical Co. Chase Bag Co. Chase Bag Co. Chase Co., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius. Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Willowbend Nursery Wisconsin Moss Co.  | BODDINK & ATKINS            | 17  |
| Canterbury Nurseries Carpenter & Co., Geo. B. Castle Chemical Co. Chase Bag Co. Chase Co., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery. Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Burr & Co., C. R.           | 11  |
| Castle Chemical Co. Castle Chemical Co. Chase Bag Co. Chase Co., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Co. Ferndale Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseryies Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Campbell-Hausfeld Co.       | 20  |
| Castle Chemical Co. Castle Chemical Co. Chase Bag Co. Chase Co., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Co. Ferndale Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseryies Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Canterbury Nurseries        | 17  |
| Castle Chemical Co. Chase Bag Co. Chase Bag Co. Chase Co., Benjamin. Colorado Seed Co. Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Carpenter & Co., Geo, B.    | 15  |
| Chase Bag Co. Chase Co., Benjamin Colorado Seed Co. Conigisky, B. F Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner Dreer, Inc., Henry A Elmgrave Nursery Evergreen Nursery Co. Ferndale Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M Harmel Peony Co. Heinze & Co., P Hebst Bros. Hill Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M Linville Nurseries Leonard & Son, A. M Linville Nurseries Loewith, Inc., Julius Lovett, Lester C Martin Co., Jos. F McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Castle Chemical Co.         | 15  |
| Colorado Seed Co. Conigisky, B. F Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A Elmgrove Nursery. Evergreen Nursery Co Ferndale Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, G. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Chara Ban Co                | 20  |
| Colorado Seed Co. Conigisky, B. F Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A Elmgrove Nursery. Evergreen Nursery Co Ferndale Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, G. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Chara Ca Basisasia          | 10  |
| Conigisky, B. F. Cottage Gardens D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrave Nursery Evergreen Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Clinville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Chase Co., Benjamin         | 17  |
| Cottage Gardens D. & C. Hardy Plant Nursery Danbury & Eagleson Doty & Doerner Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Colorado Seed Co.           | 13  |
| Cottage Gardens D. & C. Hardy Plant Nursery Danbury & Eagleson Doty & Doerner Dreer, Inc., Henry A. Elmgrove Nursery Evergreen Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Conigisky, B. F.            | 15  |
| D. & C. Hardy Plant Nursery. Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A. Elmgrave Nursery Evergreen Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonerd & Son, A. M. Linville Nurseries Lowith, Inc., Julius. Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Cottage Gardens             | 14  |
| Danbury & Eagleson Doty & Doerner. Dreer, Inc., Henry A Elmgrove Nursery Evergreen Nursery Co Ferndale Nurseries Garfield Evergreen Nursery. Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | D. & C. Hardy Plant Nursery | 18  |
| Doty & Doerner Dreer, Inc., Henry A. Elmgrave Nursery Evergreen Nursery Co. Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Holos & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   |                             |     |
| Elmgrave Nursery Evergreen Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Hebst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Ketzenstein & Co. Kingsville Nurseries Loenard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Daty & Doorner              | 13  |
| Elmgrave Nursery Evergreen Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Hebst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Ketzenstein & Co. Kingsville Nurseries Loenard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Dory a Doerner              | 13  |
| Elmgrave Nursery Evergreen Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Hebst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Ketzenstein & Co. Kingsville Nurseries Loenard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Stabler's Rose Garden Storts & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Dreer, Inc., Henry A        | 12  |
| Evergreen Nursery Co- Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Elmarove Nursery            | 18  |
| Ferndale Nursery Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Clinville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Evergreen Nursery Co        | 17  |
| Fruitland Nurseries Garfield Evergreen Nursery Geraghty & Son, John. Gladwood Gardens Goldsboro Nursery Grootendorst, A. M Harmel Peony Co. Heinze & Co., P Herbst Bros. Hill Nursery Co., D Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Leonard & Son, A. M. Clinville Nurseries Loewith, Inc., Julius Lovett, Lester C Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Ferndale Nursery            | 14  |
| Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonerd & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Fruitland Nurseries         | 17  |
| Geraghty & Son, John Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonerd & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Garfield Evergreen Nursery  | 19  |
| Gladwood Gardens Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Ketzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Carried Evergreen Hursery   | 10  |
| Goldsboro Nursery Grootendorst, A. M. Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Krezenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Geragnty & Son, John        | 13  |
| Grootendorst, A. M. Harmel Peany Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Ketzenstein & Co. Kingsville Nurseries Loenard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries Willowbend Nursery Wisconsin Moss Co.  | Gladwood Gardens            | 81  |
| Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Goldsboro Nursery           | 12  |
| Harmel Peony Co. Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Grootendorst, A. M.         | 15  |
| Heinze & Co., P. Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Ketzenstein & Co. Kingsville Nurseries Leonard & Son, A, M. Linville Nurseries Leowith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Harmel Peony Co.            | 14  |
| Herbst Bros. Hill Nursery Co., D. Hobbs & Sons, C. M. Hogansville Nurseries Howard-Hickory Co. Jackson & Perkins Co. Katzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Heinre & Co. P.             | 15  |
| Howard-Hickory Co.  Jackson & Perkins Co.  Ketzenstein & Co.  Kingsville Nurseries  Leonard & Son, A. M.  Linville Nurseries  Loewith, Inc., Julius  Lovett, Lester C.  Martin Co., Jos. F.  McGill & Son, A.  McHutchison & Co.  Miller's Gardens  Milton Nursery Co.  Oberlin Peony Gardens  Peterson & Dering, Inc.  Pitzonka's Pensy Farm  Princeton Nurseries  Stabler's Rose Garden  Storrs & Harrison Co.  Thompson, John M.  Upton Gardens  Watson Nurseries  Watson Nurseries, Arthur L.  Weller Nurseries  Willowbend Nursery  Wisconsin Moss Co.  | Harbet Reas                 | 12  |
| Howard-Hickory Co.  Jackson & Perkins Co.  Ketzenstein & Co.  Kingsville Nurseries  Leonard & Son, A. M.  Linville Nurseries  Loewith, Inc., Julius  Lovett, Lester C.  Martin Co., Jos. F.  McGill & Son, A.  McHutchison & Co.  Miller's Gardens  Milton Nursery Co.  Oberlin Peony Gardens  Peterson & Dering, Inc.  Pitzonka's Pensy Farm  Princeton Nurseries  Stabler's Rose Garden  Storrs & Harrison Co.  Thompson, John M.  Upton Gardens  Watson Nurseries  Watson Nurseries, Arthur L.  Weller Nurseries  Willowbend Nursery  Wisconsin Moss Co.  | Hill N C D                  | . 3 |
| Howard-Hickory Co.  Jackson & Perkins Co.  Ketzenstein & Co.  Kingsville Nurseries  Leonard & Son, A. M.  Linville Nurseries  Loewith, Inc., Julius  Lovett, Lester C.  Martin Co., Jos. F.  McGill & Son, A.  McHutchison & Co.  Miller's Gardens  Milton Nursery Co.  Oberlin Peony Gardens  Peterson & Dering, Inc.  Pitzonka's Pensy Farm  Princeton Nurseries  Stabler's Rose Garden  Storrs & Harrison Co.  Thompson, John M.  Upton Gardens  Watson Nurseries  Watson Nurseries, Arthur L.  Weller Nurseries  Willowbend Nursery  Wisconsin Moss Co.  | Hill Nursery Co., D.        | 1/  |
| Howard-Hickory Co.  Jackson & Perkins Co.  Ketzenstein & Co.  Kingsville Nurseries  Leonard & Son, A. M.  Linville Nurseries  Loewith, Inc., Julius  Lovett, Lester C.  Martin Co., Jos. F.  McGill & Son, A.  McHutchison & Co.  Miller's Gardens  Milton Nursery Co.  Oberlin Peony Gardens  Peterson & Dering, Inc.  Pitzonka's Pensy Farm  Princeton Nurseries  Stabler's Rose Garden  Storrs & Harrison Co.  Thompson, John M.  Upton Gardens  Watson Nurseries  Watson Nurseries, Arthur L.  Weller Nurseries  Willowbend Nursery  Wisconsin Moss Co.  | Hobbs & Sons, C. M          | 17  |
| Ketzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | riogansville reurseries     | 1/  |
| Ketzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Howard-Hickory Co.          | 17  |
| Ketzenstein & Co. Kingsville Nurseries Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Jackson & Perkins Co.       | 19  |
| Kingsville Nurseries Leonard & Son, A, M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens. Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm. Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Katzenstein & Co.           | 12  |
| Leonard & Son, A. M. Linville Nurseries Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm. Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  |                             |     |
| Linville Nurseries Loewith, Inc., Julius Lovett, Lester C  | Langaville Hurseries        | 13  |
| Loewith, Inc., Julius Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens. Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Leonard & Son, A. M.        | 18  |
| Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens. Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Linville Nurseries          | 17  |
| Lovett, Lester C. Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens. Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Loewith, Inc., Julius       | 20  |
| Martin Co., Jos. F. McGill & Son, A. McHutchison & Co. Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm. Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wilsconsin Moss Co.   | Lovett, Lester C.           | 17  |
| McGill & Son, A.  McHutchison & Co.  Miller's Gardens  Milton Nursery Co.  Oberlin Peony Gardens  Peterson & Dering, Inc.  Pierson, Inc., A. N.  Pitzonka's Pansy Farm.  Princeton Nurseries  Process Color Printing Co.  Scarff's Nurseries  Stabler's Rose Garden  Storrs & Harrison Co.  Thompson, John M.  Upton Gardens  Watson Nurseries, Arthur L.  Weller Nurseries  Willowbend Nursery  Wisconsin Moss Co.  | Martin Co. Jos. F.          | 14  |
| Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens. Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | MaCill & See A              | 13  |
| Miller's Gardens Milton Nursery Co. Oberlin Peony Gardens. Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | McGill & Jon, A.            | 13  |
| Oberlin Feony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | McHurchison & Co.           | 20  |
| Oberlin Feony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Miller's Gardens            | 12  |
| Oberlin Feony Gardens Peterson & Dering, Inc. Pierson, Inc., A. N. Pitzonka's Pensy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.  | Milton Nursery Co.          | 13  |
| Peterson & Dering, Inc. Pierson, Inc., A. N. Pierson, Inc., A. N. Pitzonka's Pensy Farm. Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Mass Co.  | Oberlin Peony Gardens       | 10  |
| Pierson, Inc., A. N. Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Wellar Nurseries Willowbend Nursery Wisconsin Moss Co.  | Peterson & Dering, Inc.     | 17  |
| Pitzonka's Pansy Farm Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Pierron Inc. A N            | 9   |
| Princeton Nurseries Process Color Printing Co. Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co. Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Mass Co.   | Ottoral a Danie Com         | IE  |
| Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Mass Co.   | Pittonka's Pansy Parm       | 13  |
| Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Mass Co.   | Princeton Nurseries         | 17  |
| Scarff's Nurseries Stabler's Rose Garden Storrs & Harrison Co Thompson, John M. Upton Gardens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Mass Co.   | Process Color Printing Co.  | 15  |
| Stabler's Rose Garden Storrs & Harrison Co   | Scarff's Nurseries          | 13  |
| Storrs & Harrison Co   | Stabler's Rose Garden       | 18  |
| Thompson, John M. Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Mass Co.   | Storrs & Harrison Co.       | 11  |
| Upton Gerdens Watson Nurseries, Arthur L. Weller Nurseries Willowbend Nursery Wisconsin Mass Co.   | Thomason John M             | 18  |
| Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Hata Cardan                 | 2   |
| Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Opton Gardens               | 1.6 |
| Weller Nurseries Willowbend Nursery Wisconsin Moss Co.   | Watson Nurseries, Arthur L  | 14  |
| Willowbend Nursery Wisconsin Moss Co.  | Weller Nurseries            | 15  |
| Wisconsin Moss Co.   | Willowbend Nursery          | ΙZ  |
| Wolf Bros  | Wisconsin Moss Co.          | 19  |
|  | Wolf Bros.                  | 19  |

6

F

IN



Over 1400 Dealers — In 46 States

Made Money Last Season Selling

### J. & P. ROSE NOVELTIES

(An increase of 500 over last year)

:- Ask us for Particulars -:

### You Are Cordially Invited to Visit ROSE TEST GARDENS

at Newark

#### See the Roses of the Future

These Test Gardens contain over 22.000 rose plants—over 1000 named varieties and several thousand new unnamed seedlings of our own hybridizing and from rose hybridizers in all parts of the world, from which introductions are most carefully and rigidly selected.

#### - OTHER SPECIALTIES -

NEW AND IMPROVED Strains in PERENNIALS Flowering Trees Ornamental Trees Evergreens

### **JACKSON & PERKINS COMPANY**

Wholesale Only

Distributors and Hybridizers of New Roses & Plant Specialties

NEWARK, NEW YORK

### LABELS FOR NURSERYMEN

THE BENJAMIN CHASE COMPANY

DERRY, N. H.

#### "PLEASE RECOMMEND-"

Why not come to Twine Headquarters and make sure of getting the RIGHT TWINE for your purpose at the LOW-EST COST? Jute, Sisal, Java, Cotton. etc. Send a sample of what you are using, and let us recommend. No obligation!

FREE! Ask for folder "Knots the Sallors Use" with 8 pages, 79 pictures. Shows how to tie almost any useful knot. Write today!

GEO. B. CARPENTER & CO.

440 N. Wells St.

Chleage

### • MOSS •

Carlots or less, write

WISCONSIN MOSS CO.
Wisconsin Rapids, Wis.

### NATIVE PLANTS in Full Color

365 native plants pictured in actual colors and accompanied by full descriptions

### WILD FLOWERS

by Homer D. House

In this book are described the native plants to be found in the United States from coast to coast, and from Canada to Texas. An extensive index lists every flower under both botanical and common names. Homer D. House, New York State Botanist, planned this undertaking in cooperation with the leading botanists of the country. There is no other single volume that can identify native plants for you with such unquestioned accuracy.

Native plants are assuming larger importance as garden materials. 340 pages of text give reliable and comprehensive information. Of the 365 beautiful color photographs, 165 are full-page, and 200 of them, half-page plates.

The finest collection of photographs of native plants in actual size and color.

87.50

American Nurseryman, 508 S. Dearborn St., Chicago

### TREE SEED

#### WHOLESALE ONLY

For Immediate Shipment from New York

Imported Prunus Mahaleb Imported Pinus Strobus Imported Robinia PseudoAcacia

Now Offering for Import at Very Attractive Prices 50—100—500-lb. lots Pinus insignis (Monterey pine)

Pinus insignis (Monterey pine)
Pinus muricata
Cupressus Lawsoniana
as well as any other Tree Seed
varieties.

Wanted to Buy for Export for October Shipment

220 lbs. Catalpa speciosa, 1935 crop, northern Illinois or Indiana-grown. 220 lbs. Catalpa, western, 1935 crop, northern Illinois or Indiana-grown. 220 lbs. Prunus pennsylvanica, 1935 crop, grown around Athabaska River and British Columbia.

440 lbs. Fraxinus viridis, 1935 crop, Dakota-grown.

220 lbs. Celtis occidentalis, 1935 crop, grown in eastern part of Washington.

440 lbs. Juglans nigra, 1935 crop, grown northern part Wisconsin, Michigan, Minnesota.

#### RAFFIA - AA Quality

Our Forget-Me-Not Brand Guaranteed to satisfy

### JULIUS LOEWITH, INC.

120 East 16th Street NEW YORK CITY

### DUTCH BURLAP SQUARES

For balling Evergreens, etc. Better and cheaper. In 8 sizes, 500 per bale.

CHINESE TONKIN CANES— For staking small trees and evergreens. 9 sizes, bale lots.

RAFFIA—Headquarters for Red Star and 3 other dependable brands. Bale lots or less.

DUTCH BULBS — Tulips, Hyacinths, Crocus, from stock now here. Bag lots.

HARDY LILY BULBS — Jap. varieties, also Regale, Candidum, etc.

GRANULATED PEAT — Horticultural grade, finely pulverized, carloads or less.

BOXWOOD — Sempervirens; bushes, balls, pyramids, stand-

INQUIRIES INVITED.

#### McHUTCHISON & CO.

95 Chambers St.,

New York

Write for Samples and Price List



We will send full size working samples that will prove in your own shipping room that SAXOLIN is superior to any other wrapper for retaining dirt and moisture around the roots and delivering a clean, attractive package.

SAXOLIN is two sheets of kraft paper cemented with asphalt filler and crinkled to stretch and conform to shape of bundle.

It's waterproof-tough and easy to handle.

If you are using any special size material for wrapping tell us the size and we will send samples. Try SAXOLIN now and be ready for your next shipping season.



Specialty Dept. -:- Cleveland, Ohio

## WRITE FOR 10-DAY TRIAL OFFER on this High Pressure PARAGON SPRAYER



Co d prices and des as per advertise-

T EST it for yourself. Compare results with what you have been getting from your present sprayer. Use any spray solution or cold water paint. Spray your nursery stock, whitewash your greenhouses, barns and tool sheds, inside and out. Note how easily this Paragon delivers 300 to 400 lbs. uniform pressure at the nozzle with

little effort at the pump handle. Passes through narrowest aisles without jamming at corners. Automatic agitator prevents solution from settling. We guarantee it never to clog while in use. Ten days trial costs you nothing if not satisfied. If your dealer does not sell the Paragon, mail the coupon today.

The Campbell-Hausfeld Company

703 State Ave. Harrison, Ohio

Harrison, Ohio
Name......Post Office .......
Street State

\*\*\*\*